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2019-2020 College Catalog

Welcome to the Carl Sandburg College Catalog for the 2019-2020 academic year. We are pleased to provide a searchable catalog online. This is one way we encourage you to "go green" and utilize the resources available on the internet. You can also access a PDF version of the catalog here. If you would like to print information from the catalog, we invite you to take advantage of the click-to-print technology that will allow you to print the sections that you need. This is located in the red banner throughout the searchable catalog, labeled “Print Options.”

We welcome your feedback and suggestions to make this catalog better for the future. Feedback may be provided by email to the Executive Assistant for the Vice President of Academic Services at lhuber@sandburg.edu (bgrimes@sandburg.edu).
ABOUT SANDBURG

Illinois Community College District No. 518

www.sandburg.edu

Main Campus
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone 309.344.2518
Fax 309.344.3526

Branch Campus
305 Sandburg Dr.
Carthage, IL 62321
Phone 217.357.3129
Fax 217.357.3512

ADDITIONAL LOCATIONS

ANNEX
Located in downtown Galesburg, the Annex houses the College's dental hygiene program.
209 East Main St.
Galesburg, IL 61401
Phone: 309.344.2595
Fax: 309.344.2611
TTY line: 309.341.5400

ABINGDON-AVON HIGH SCHOOL (DUAL CREDIT ONLY)
Located in Abingdon, Illinois, Abingdon-Avon High School offers a complete Associate in Arts degree through dual credit courses.
600 West Martin St.
Abingdon, IL 61410

GALESBURG HIGH SCHOOL (DUAL CREDIT ONLY)
Located in Galesburg, Illinois, Galesburg High School offers a certificate in Computer Numerical Control (CNC).
1135 West Fremont St.
Galesburg, IL 61401

HAMILTON HIGH SCHOOL (DUAL CREDIT ONLY)
Located in Hamilton, Illinois, Hamilton High School offers transferable courses towards either an Associate in Arts or Associate in Science degree, as well as, allied health and automotive courses.
1100 Keokuk St.
Hamilton, IL 62341

WARSOW HIGH SCHOOL (DUAL CREDIT ONLY)
Located in Warsaw, Illinois, Warsaw High School offers transferable courses towards either an Associate in Arts or Associate in Science degree.
340 South 11th St.
Warsaw, IL 62379

Approved By

Accredited By
The Higher Learning Commission
Phone 312.263.0456/800.621.7400
http://www.hlcommission.org

Program Accreditation:
Accreditation Commission for Education in Nursing
Phone 404.975.5020
http://www.acenursing.org

American Board of Funeral Service Education
816.233.3747
http://www.abfse.org

The Commission on Dental Accreditation
312.440.4653
http://www.adha.org

Illinois State Board of Nursing Approved Program
312.814.4500
http://www.idfpr.com

Membership and Recognition

Student Responsibility
All students are expected to familiarize themselves with the provisions of this Catalog. Enrollment at Carl Sandburg College implies an understanding and acceptance by the student of an obligation to abide
by the academic, administrative and social regulations of the College. Failure to read and comply with college regulations does not exempt a student from such responsibility. Keep this catalog as a reference for graduation requirements in Associate Degree Programs and Certificates.

Any student who wishes to examine the policies of the College should see the Vice President of Student Services.

**Nondiscrimination Statement**

The College, an equal opportunity/affirmative action employer and educator, complies with all applicable federal, state, and/or local laws prohibiting discrimination. It is the policy of the College that no person shall be discriminated against in employment, educational programs and activities, or in admissions on the basis of race, color, religious affiliation, gender (sex), sexual orientation, gender identity or expression, national orientation, ancestry, genetic information, disability, age, arrest record status, marital or family status, citizenship status (with regard to employment), military status, unfavorable military discharge, sexual harassment, order of protection status and status in any group protected by applicable federal, state and/or local laws.

The College will direct individuals to resources for English language proficiency so that the lack of English proficiency will not be a barrier to future employment, admissions and participation in CTE programs. Career and technical education courses/program offerings and admission criteria are on our web site, www.sandburg.edu, or by calling 309.341.5234. Title IX Coordinator Rick Eddy, 309.341.5234; ADA/Section 504 Coordinator: Jacob Runge, 309.341.5262.

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This catalog is for information purposes and does not constitute a contract.

Published by Carl Sandburg College
Galesburg, IL 61401
PRESIDENT’S MESSAGE

Welcome to Carl Sandburg College. Our excellent faculty and staff are here to help guide you on your educational journey of discovery. Some of you have already figured out your general pathway, but others are here to discover what the college has to offer. Believe me, anything you can dream is possible here at Sandburg.

Our staff and faculty are committed to helping you discover your talents and hone skills to make sure that you are ready for the next stage in your life journey. So, whether you are just trying out a class or two, focused on a career in health professions or manufacturing, or laying the solid foundation to transfer to any school in the nation, you have come to the right place.

Our student support services and our technology support are second to none, and we offer you the ability to take classes in a variety of modalities to meet your needs. Carl Sandburg College offers the complete college experience with many student clubs and organizations, opportunities to volunteer in the community, and excellent athletic teams. Our faculty are constantly learning too, and we are excited to offer a new cybersecurity certificate, new courses in agriculture, and a maker space in the library.

At Sandburg, we celebrate the academic achievements of our students and the artistic and scholarly efforts of our faculty and staff. We believe that anything is possible, but in the words of Carl Sandburg, “nothing happens unless first a dream.” So, welcome to Carl Sandburg College, where we can help make your dreams a reality.

Dr. Seamus Reilly, President
Carl Sandburg College
BOARD OF TRUSTEES

Thomas H. Colclasure, Galesburg
Lee E. Johnson, Galesburg
Bruce A. Lauerman, Galesburg
Gayla J. Pacheco, Galesburg
Alfonso Pugh, Jr., Galesburg
William C. Robinson, Galesburg
Sandra L. Wood, Galesburg
Robert Wolford Jr., Student Trustee (18’19 Academic Year)
Carla Eagen, Faculty Representative (18’19 Academic Year)
Cory Gall, Board Treasurer/Chief Financial Officer
Lindsey Huber, Secretary to the Board of Trustees
Carl Sandburg College is named for Pulitzer Prize-winning poet and Lincoln biographer Carl Sandburg, who was born and raised in Galesburg. The son of Swedish immigrant parents, Sandburg was born Jan. 6, 1878, in a small cottage near the rail yards where his father worked. The cottage, on Galesburg’s south side, is preserved today as an Illinois historical site.

Sandburg published numerous volumes, including “Chicago Poems”; “Cornhuskers”; “Rootabaga Stories”; “The People, Yes”; “Abraham Lincoln: The Prairie Years and The War Years”; and “Always the Young Strangers.” He received two Pulitzer Prizes — in history, for his “Abraham Lincoln: The War Years” (1939), and in poetry, for his “Collected Poems” (1951). The central theme throughout Sandburg’s works is his belief in the essential goodness and drive of the common man and woman. His writing is full of optimism for the future of the human race.

Carl Sandburg and his mentor, Professor Philip Green Wright of Lombard College, also located in Galesburg, envisioned the establishment of “a People’s Industrial College, where people of all ages would be taught, in addition to literature, philosophy, sociology, science, music, and art, something about industry and farming, such as agriculture, horticulture, bee culture, cabinet-making, metalworking, pottery, architecture, printing and publishing, and bookbinding.” (From Margaret Sandburg’s unpublished manuscript Biography of Carl Sandburg.) The two men felt that this “People’s College” should be located by a river or on a lake.

Though Sandburg died in 1967, the College’s ties with its namesake remain strong. In 1979, the late Helga Sandburg, Carl’s youngest daughter, was awarded the College’s first honorary associate degree. She returned to the campus in 1987, 1994 and in 2006 as the commencement speaker at graduation exercises. Additionally, Helga was a guest of honor at the annual community celebration, the Sandburg Days Festival, from its inception in 1996 to 2005. Both Helga and Penelope Niven, who was Sandburg’s biographer, helped to formulate and develop the annual festival. Sadly, both Helga and Penelope passed away in 2014, leaving the College without two of the people most closely associated with its namesake.

The referendum creating what is now Carl Sandburg College was passed by the voters of Knox and Warren counties on Sept. 24, 1966. The first classes were held the same day the following year, Sept. 24, 1967, in a variety of facilities in downtown Galesburg. Since then the College has expanded considerably, both in the scope of course offerings and in territory, in an effort to meet the educational needs of the residents of west-central Illinois.

In 1969, the College occupied the site on South Lake Storey Road in Galesburg on which the permanent Main Campus would be constructed. The permanent facilities were opened in 1976. In the meantime, the College annexed 16 additional high school districts in 1974, which eventually resulted in the establishment of additional facilities to ensure the delivery of services for all residents of what is officially Illinois Community College District 518.

What is now the Branch Campus in Carthage offered its first classes in the winter of 1974. The Main Campus has also undergone major recent renovations to keep Carl Sandburg College on the cutting edge of the technological revolution.

In 2017, the College for the fourth straight year was named National Champion in the Small Colleges Category of the Digital Community Colleges Survey by e.Republic’s Center for Digital Education, continuing its reputation as one of the leading community colleges in the country for technology. The College continues to serve its 3,000-square-mile district and fulfill its mission and vision and remain true to its core values for excellence, collaboration, integrity and respect.
DISTRICT MAP
# ACADEMIC CALENDAR

Academic calendar dates may change. Please check online at www.sandburg.edu.

## Fall Semester 2019

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<tr>
<td>Fall Tuition Due</td>
<td>Tuesday, August 6</td>
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<tr>
<td>Registration Ends</td>
<td>Friday, August 16</td>
</tr>
<tr>
<td>CLASSES BEGIN</td>
<td>Monday, August 19</td>
</tr>
<tr>
<td>LABOR DAY — NO CLASSES — OFFICES CLOSED</td>
<td>Monday, September 2</td>
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<td>Midterm for Fall</td>
<td>Thursday, October 10</td>
</tr>
<tr>
<td>FALL BREAK — NO CLASSES</td>
<td>Friday, October 11</td>
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<tr>
<td>THANKSGIVING VACATION — NO CLASSES — OFFICES CLOSED</td>
<td>Thursday-Friday, November 28 &amp; 29</td>
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<tr>
<td>Last Day to Withdraw</td>
<td>Tuesday, November 19</td>
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<tr>
<td>Fall Classes End</td>
<td>Thursday, December 5</td>
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<tr>
<td>EMERGENCY DAY/NO CLASSES UNLESS NECESSARY</td>
<td>Friday, December 6</td>
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<td>FINAL EXAMS</td>
<td>Monday-Thursday, December 9, 10, 11, 12</td>
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<td>Tuesday, December 24-Wednesday, January 1</td>
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## Winter Session 2020

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<td>Winter Tuition Due</td>
<td>Tuesday, December 10</td>
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<td>Registration Ends</td>
<td>Friday, December 13</td>
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<td>CLASSES BEGIN</td>
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<td>MIDTERMS</td>
<td>Thursday, December 26</td>
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<td>Last Day to Withdraw</td>
<td>Tuesday, January 7</td>
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<td>WINTER SESSION ENDS</td>
<td>Thursday, January 9</td>
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<td>Spring Tuition Due</td>
<td>Tuesday, December 12</td>
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<td>Registration Ends</td>
<td>Friday, January 10</td>
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<td>CLASSES BEGIN</td>
<td>Monday, January 13</td>
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<td>MARTIN LUTHER KING JR’S BIRTHDAY — NO CLASSES — OFFICES CLOSED</td>
<td>Monday, January 20</td>
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<td>Midterm for Spring</td>
<td>Thursday, March 5</td>
</tr>
<tr>
<td>SPRING BREAK — NO CLASSES</td>
<td>Friday - Sunday, March 6-15</td>
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<td>Registration for Fall Begins</td>
<td>Monday, April 6</td>
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<tr>
<td>NO CLASSES — OFFICES CLOSED</td>
<td>Friday, April 10</td>
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<tr>
<td>Last Day to Withdraw</td>
<td>Tuesday, April 21</td>
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<td>Spring Classes End</td>
<td>Wednesday, May 6</td>
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## 3 Week Summer Session 2020

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<td>Friday, May 15</td>
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<td>CLASSES BEGIN</td>
<td>Monday, May 18</td>
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<td>MEMORIAL DAY — NO CLASSES — OFFICES CLOSED</td>
<td>Monday, May 25</td>
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<td>Wednesday, May 27</td>
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<td>Wednesday, June 3</td>
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<td>Pre-Summer Session Ends</td>
<td>Friday, June 5</td>
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## 8 Week Summer Session 2020

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<td>Summer Tuition Due</td>
<td>Tuesday, May 5</td>
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<td>Registration Ends</td>
<td>Friday, June 5</td>
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<td>CLASSES BEGIN</td>
<td>Monday, June 8</td>
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<td>JULY 4 BREAK — NO CLASSES — OFFICES CLOSED</td>
<td>Friday, July 3</td>
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<td>Midterm for 8 Week Summer Session</td>
<td>Friday, July 2</td>
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<tr>
<td>Last Day to Withdraw</td>
<td>Monday, July 27</td>
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<td>Friday, July 31</td>
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## 11 Week Summer Session 2020

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<td>Registration Ends</td>
<td>Friday, May 15</td>
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<td>Classes Begin</td>
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<td>Memorial Day- OFFICES CLOSED/NO CLASSES</td>
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<td>Last Day to Withdraw from 11 Week Session</td>
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<td>Friday, July 31</td>
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</table>
MISSION AND STATEMENTS

Mission Statement
The mission of Carl Sandburg College is to provide all students with opportunities for success.

Vision Statement
Where dreams come to life, and lives come to change.

Core Values
- Excellence
- Collaboration
- Integrity
- Respect

Nondiscrimination Statement
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Priorities & Purposes

Priorities & Goals

1. Student Access and Success
   a. Advance equitable access, engagement and success of all students.
      i. Provide institutional leadership that integrates inclusion in all aspects of the College.
      ii. Champion engagement with external partners and stakeholders.
      iii. Provide academic and co-curricular opportunities that facilitate inclusivity.
   b. Implement strategies as determined by the student’s voice.
      i. Build student support structures that respond to individual student’s needs while maintaining quality.
      ii. Create avenues in which current and potential students can provide the college input on their needs.
      iii. Advance connections between students and college personnel.
   c. Increase the retention, persistence, and completion of an inclusive student body.
      i. Expand efforts to attract a diverse student population.
      ii. Enable the student experience to flow seamlessly from recruitment through completion.
      iii. Create learning opportunities through community partnerships.
      iv. Expand efforts to provide financial support for students.
   d. Increase direct communication with students and employees as all locations.
      i. Embed ambassadorship into all college position responsibilities.
      ii. Initiate avenues that provide the sharing and accessibility of resources, new initiatives, and best practices of all departments.

2. Teaching and Learning
   a. Ensure the quality of educational programs, learning environments, and support services through continuous improvements.
   b. Develop and cultivate industry specific partnerships to expand the breadth of offerings at Carl Sandburg College.
      i. Establish an understanding of how stakeholders define quality
      ii. Cultivate comprehensive understanding of student and community needs.
      iii. Respond timely to district needs.
      iv. Utilize partnerships to increase the variety of educational offers throughout the district.
   c. Implement an enhanced student experience that results in greater opportunities for employment.
      i. Adapt student pathways through accessibility, program flexibility, and course availability.
      ii. Sustain a comprehensive understanding of the labor market’s needs.
      iii. Expand efforts to provide transition services to employment for students.
      iv. Increase flexibility of course delivery using technology.
   d. Create environments for students that nurture engagement.

3. Community Alliances
   a. Broaden dynamic connections with stakeholders: students, alumni, K-12 programs, community members and business partners through targeted communication.
   b. Bolster education opportunities using off-site/partner locations through out the district.
   c. Deliver consistent dual credit programs which provide students access to college services and support.
   d. Strengthen partnerships with four-year colleges and universities.
   e. Meet training needs of college district and region.

4. Operational Sustainability and Excellence
   a. Promote an environment of understanding between college and stakeholders.
      i. Amplify institutional standards and practices to streamline internal and external communication.
      ii. Provide targeted and timely communication.
      iii. Expand information sharing practices.
      iv. Establish communication methods that promote the free exchange of ideas from stakeholders.
   b. Attain an institutional culture of integrated problem-solving.
      i. Develop an avenue to identify and discuss cross-departmental problems/issues.
      ii. Empower “problem-solving” teams to implement and assess continuous improvements.
      iii. Advance the use of data in the institutional culture for decision-making.
   c. Strengthen human resource capital
      i. Administer a competitive compensation program that enables the College to attract and retain a quality workforce.
      ii. Execute strategies focused on employee retention.
      iii. Cultivate a commitment to inclusivity in hiring.
      iv. Ensure professional development opportunities for college employees.
   d. Assure the innovative use of resources.
      i. Maintain a sustainable budget that fully meets the College’s needs and responsibly uses the resources of the district.
      ii. Obtain new grant funding and maintain ethical stewardship of grant money.
      iii. Maintain and refresh high-quality facilities and grounds support innovation, teaching and learning.
   e. Assure compliance with accrediting bodies and governmental agencies.

Educational Purposes

In its efforts to be a premiere learning and teaching institution, Carl Sandburg College is dedicated to fulfilling the following major functions:

Provide associate degree-level education consisting of liberal arts, sciences, and pre-professional fields designed to prepare students for transfer to baccalaureate-granting institutions;

Provide business, technical, and professional education that offers associate degrees, certificates, courses, workshops, and seminars designed for career, entry-level employment, retraining, and/or
upgrading of skills to meet current and emerging employment needs and trends;

Provide courses and programs designed to assist academically underprepared students to be successful in their next level of education;

Provide activities designed to meet the lifelong educational needs and interests of individuals throughout the district;

Provide services designed to meet the needs of the student population including recruitment, admissions, registration, assessment, counseling, tutoring, career planning, academic advisement, financial aid, job placement, co-curricular activities, and inter-collegiate athletics;

Provide programs and services designed to meet the customized continuing education and technical assistance needs of individuals, businesses, industries, and community organizations;

Serve as a center for cultural and intellectual development.
GENERAL EDUCATION OUTCOMES

Communication
Demonstrate proficiency in speaking, writing, reading and listening.

Critical Thinking
Demonstrate critical thinking skills and problem solving skills.

Cultural Diversity
Demonstrate an awareness of human values and diverse cultures.

Information Technology
Demonstrate understanding and skills to function in a technological society.

Quantitative Skills
Demonstrate use of quantitative analytical skills and processes to interpret, evaluate and solve problems.
ADMISSION & REGISTRATION

Admissions Policy

Admission is open to all in-district residents of Community College District 518 who are high school graduates or the equivalent (GED), or non-graduates who are at least 18 years of age. Admission to the College does not ensure admission to a particular course or program of study.

Admission is also open to people in the following categories:

1. Out-of-district, out-of-state, and international residents.
2. Students whose connection with a secondary school is severed. Any student who is 16 or 17 years of age and has severed connection with a secondary school, as certified in writing by the chief executive officer of the secondary school in which the student has legal residence, is eligible to attend Carl Sandburg College.
3. Students currently enrolled in a secondary school program. Students currently enrolled in a secondary school program may be accepted into college course(s). If such courses are offered during the regular school year established by the secondary school or are offered for secondary school credit, prior approval of the chief executive officer of the secondary school must be received.
4. Admission of students in programs for special groups.
5. Students less than 16 years of age who have the approval of the chief executive officer of their school and/or the chief student services officer of Carl Sandburg College.

Should it be necessary to limit enrollment, priority will be given to residents of Carl Sandburg College District 518 or to residents of a community college district involved in a cooperative agreement with Carl Sandburg College. The College reserves the right to establish selective admission requirements for any or all programs. All programs and their respective admission requirements will be identified in the College catalog.

An eighth grade reading level as demonstrated by a standardized test approved by the college is required for admission to developmental and credit classes. This requirement does not apply to Corporate and Leisure classes.

Carl Sandburg College will not discriminate in the admission of students on the basis of the student’s sex, color, race, religion, creed, ancestry, national origin, physical or mental disability, sexual orientation, sexual identity or other protected group status.

Admission to AA/AS/AFA Programs

Students enrolling in the Associate in Arts, Associate in Science, or Associate in Fine Arts degree programs must have completed the following college preparatory courses as outlined in the Illinois Public Act 86-0954:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Years of Coursework</th>
<th>Explanatory Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>Written &amp; oral communications, literature</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>Minimum of one year of Algebra I, one year of geometry, &amp; one year of Algebra II</td>
</tr>
<tr>
<td>Science</td>
<td>2</td>
<td>Laboratory science</td>
</tr>
</tbody>
</table>

College preparatory course requirements for admission to the AA/AS/AFA degree programs as outlined above will be waived for students who have completed 32 semester hours of college coursework (100 level or above) with grades of "C" or better.

The Illinois State Board of Education requires that students who wish to enter into a transfer program (AA/AS/AFA) must meet the requirements listed in the above chart (Illinois Public Act 86-0954). Carl Sandburg College is an open admissions community college, students will be admitted to the college without these courses. Students who enroll in certain programs will be required to meet prerequisites to enroll in some courses.

Health Career Program Admissions

Admission to many of Carl Sandburg College’s Health Career programs (Associate Degree Nursing, Practical Nursing, Radiologic Technology, Computed Tomography, Magnetic Resonance Imaging, Dental Hygiene, Mortuary Science, Medical Assisting, and Paramedic) is limited and, therefore, competitive. Selection is based on candidates’ overall academic performance. The most qualified applicants who are residents of the Carl Sandburg College District or of community college districts involved in a cooperative agreement with Carl Sandburg College will be given preference for admission to these programs. Students who have not fulfilled these requirements when they initially enroll at Carl Sandburg College will be admitted to the college without these courses. Students who enroll in certain programs will be required to meet prerequisites to enroll in some courses.

International Admissions

International students are welcome at Carl Sandburg College. The College is authorized under federal law to enroll students who require an F-1 VISA. Prospective international students should contact the director of admissions and records (309.341.5234) to discuss their eligibility for admission.

Each student is encouraged to consult with a professional counselor at Carl Sandburg College in the selection of a program consistent with the student’s interests and abilities.
International Student Admission Steps
New full-time international students need to obtain a Form I-20 to receive a student visa through the U.S. Consul or Embassy in their country. The I-20 indicates that all admission requirements have been met to enter the College. This document is issued through SEVIS, the Student Exchange Visitor Information System. The U.S. Consulates make the final decision regarding whether students will be allowed to enter the United States to study.

All international students must report to Carl Sandburg College on or before the date stated on the Form I-20. Late-arriving students will not be able to register for class.

International students requesting admission and issuance of a Form I-20 must provide:

• A completed Carl Sandburg College Application for Admission. (http://www.sandburg.edu/Admissions/International-Student-Admissions/International-Application.html)
• A Financial Resource Statement verifying the ability of the student or the student’s sponsor to meet all educational and living expenses for one year while attending Carl Sandburg College. This must be signed and sealed by a notary public and accompanied by a letter or bank statement dated within six months of the application. Financial support of approximately $21,000 (USD) is needed per year.
• An official transcript that provides evidence of graduation from a secondary school and transcripts from all postsecondary institutions attended. Photocopies may be accepted if they are properly notarized as true copies. Transcripts must be translated into English.
• Official evidence of English proficiency. All full-time and part-time students whose native language is NOT English are required to: take TOEFL (Test of English as a Foreign Language) and earn a score score of 68 on the Internet-based exam, or 190 on the Computer-based exam or 520 on the Paper-based exam.

OR
• submit official transcripts from an accredited United States college or university showing successful completion (‘C’ or better grade) of a college-level writing course and 6 hours of college-level academic course work requiring reading

OR
• complete ACT with a score of 19/ SAT 890 or higher in Reading and Writing Completion of any additional entry requirements for the program of study.

The College will issue an Form I-20 Certificate of Eligibility form after students complete the steps above and qualify for admission.

Readmission
Students who have previously attended Carl Sandburg College and want to return after an absence of one semester or more must notify the Admissions and Records Office of any changes in name, address, phone number, academic program, etc. Some academic programs have special readmission policies and procedures.

Steps to Enroll
Step 1: Discover your options at Sandburg
• Learn more about what Sandburg has to offer. Visit the Welcome Center in building B at the Galesburg campus; or speak with an advisor at the Carthage campus. Take a tour of campus and explore the various educational programs.

Step 2: Submit an application
• Complete and submit an application at recruiter.sandburg.edu
• You will receive a welcome letter about 1 week after with your student ID, email and mySandburg login.

Step 3: Apply for financial aid
• Go to fafsa.ed.gov (http://fafsa.ed.gov) to complete the Free Application for Federal Student Aid (FAFSA) to apply for both federal and state financial aid.
• If possible, apply before November 15th to ensure the aid that you qualify for is available.
• Carl Sandburg College’s code is 007265.

Step 4: Request official transcripts
• Request all high school transcripts be sent to Sandburg.

OR
• If you have completed the high school equivalency exam (GED, Hi-Set, etc.) request transcripts be sent to Sandburg.

AND
• If you have completed any college credit please request transcripts be sent to Sandburg.
• Send to: Carl Sandburg College Attn: Admissions 2400 Tom L Wilson Blvd. Galesburg, IL 61401.

Step 5: Take the Placement Test*
*An eighth grade reading level as demonstrated by a standardized test approved by the College is required for admission to developmental and credit classes. This requirement does not apply to Corporate and Leisure classes.

• This untimed assessment test covers reading and math, and will determine the level of classes you may begin.
• Prepare for this test before you take it. Go to sandburg.edu/accuplacer for practice tests, sample questions.
• If you would like reading assistance to complete the test, please contact Disability Support Services at 309.341.5262.
• Register at sandburg.edu/accuplacer; welcomecenter@sandburg.edu or 309.345.3500.
• Note: in lieu of ACCUPLACER testing, official ACT or SAT scores will be accepted for placement if the test was taken within two years of the admission date to Carl Sandburg College. For detailed information on placement testing cut scores, please visit: sandburg.edu/accuplacer

Step 6: Register for classes
• Schedule an appointment with an advisor to register for courses. Call 309.341.5237 at the Galesburg campus or 217.357.3129 at Carthage campus.

For additional assistance contact the Welcome Center welcomecenter@sandburg.edu 309.345.3500
Online/Blended Courses

Online courses offer the same high quality instruction as their equivalent on-campus counterparts. These instructor-led courses are delivered through the Internet. By using the Internet students are able to link to faculty and other students in the class.

With Sandburg Online, learning can be accessible and flexible. If students have a busy schedule, they are able to "attend" class at times that best fit their schedule.

While the courses begin and end on specific dates and the course work has assigned deadlines, you can work at your own pace within the deadlines. For more information, please check our Web site at http://www.sandburg.edu/Academics/Online-Learning/index.html

Blended learning combines both traditional (face-to-face) classrooms with online coursework. This type of class can be structured a variety of ways, but typically it meets in the classroom once a week, and then the student completes the rest of the week’s activities online. This provides a more flexible schedule, but keeps the personal touch of face-to-face meeting time. Because of the added online coursework, students can finish the same hours and the same course rigors with half the time or less being spent in the classroom.

Dual Credit Opportunities for High School Students

Carl Sandburg College works cooperatively with the high schools within the Sandburg district who wish to provide college-level courses for their students. Dual credit allows eligible students to receive both high school and college credit for successfully completing college-level courses. These college courses may be offered at the high school location, online, or the student may attend at one of the Carl Sandburg College campuses. Students must have the permission of the high school and obtain sufficient scores on a placement test to enroll in college courses. For detailed information, please contact the Welcome Center 309-345-3500 or welcomecenter@sandburg.edu.

Illinois Articulation Initiative (IAI)

Carl Sandburg College is a participant in the Illinois Articulation Initiative. The General Education Core Curriculum (GECC) was incorporated into the Associate in Arts and Associate in Science degrees effective Summer 1998. Since completion of the Associate in Fine Arts (A.F.A.) degrees does not complete the Illinois Transferable General Education Core Curriculum (IAI GECC), students will need to complete the general education requirements of the school to which they transfer. For further information about IAI, go to the Web site at www.itransfer.org (http://www.itransfer.org). The initiative includes public community colleges, public universities and some private colleges and universities in the state of Illinois. If you are considering attendance at a private college or university or an out-of-state institution, you should check with their transfer coordinator.

General Education Core Curriculum (GECC)

The GECC is made of statewide articulated courses that will be accepted for transfer by all participating colleges and universities in Illinois. A list of participating institutions can be found here (insert link). Students who complete Sandburg’s General Education requirements (37 credit hours across 5 academic disciplines, and a Human Relations course), will have a statement placed on their transcript indicating completion of the GECC. This is part of a transferrable degree and is not considered a certificate nor an industry-recognized credential.

The GECC provides an advantage for students who are undecided about their college plans, including where they want to continue their education and what field of study they wish to pursue.

IAI GECC Courses (Current and Future)

<table>
<thead>
<tr>
<th>School Prefix/No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART.111</td>
<td>Art Appreciation (IAI F2900)</td>
<td>3</td>
</tr>
<tr>
<td>ART.112</td>
<td>Art: Prehistoric to 1400 (IAI Code F2901)</td>
<td>3</td>
</tr>
<tr>
<td>ART.113</td>
<td>Art: 1400 to Present Day (IAI Code F2902)</td>
<td>3</td>
</tr>
<tr>
<td>BIO.101</td>
<td>General Biology (IAI Code L19000L)</td>
<td>4</td>
</tr>
<tr>
<td>BIO.120</td>
<td>Environmental Science (IAI Code L1905)</td>
<td>3</td>
</tr>
<tr>
<td>CHM.100</td>
<td>Concepts of Chemistry (IAI Code P1902L)</td>
<td>3</td>
</tr>
<tr>
<td>CHM.110</td>
<td>General Chemistry 1 (IAI Code P1902L)</td>
<td>4</td>
</tr>
<tr>
<td>ECO.101</td>
<td>Introduction to Economics (IAI Code S3900)</td>
<td>3</td>
</tr>
<tr>
<td>ECO.201</td>
<td>Principles of Macro Economics (IAI Code S3901)</td>
<td>3</td>
</tr>
<tr>
<td>ECO.202</td>
<td>Principles of Micro Economics (IAI Code S3902)</td>
<td>3</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1 (IAI Code C1900)</td>
<td>3</td>
</tr>
<tr>
<td>ENG.102</td>
<td>Freshman Composition 2 (IAI Code C1901R)</td>
<td>3</td>
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<tr>
<td>ENG.151</td>
<td>Introduction to Film Art (IAI Code F2908)</td>
<td>3</td>
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<tr>
<td>ENG.160</td>
<td>Introduction to Fiction (IAI Code H3901)</td>
<td>3</td>
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<tr>
<td>ENG.170</td>
<td>Introduction to Drama (IAI Code H3902)</td>
<td>3</td>
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<tr>
<td>ENG.180</td>
<td>Introduction to Poetry (IAI Code H3903)</td>
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<tr>
<td>ENG.221</td>
<td>American Literature 1 (IAI H3914)</td>
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<td>ENG.222</td>
<td>American Literature 2 (IAI H3915)</td>
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<tr>
<td>ENG.231</td>
<td>British Literature 1 (IAI H3912)</td>
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<tr>
<td>ENG.232</td>
<td>British Literature 2 (IAI H3913)</td>
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<tr>
<td>ENG.240</td>
<td>Women and Literature (IAI H3911D)</td>
<td>3</td>
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<tr>
<td>GEO.100</td>
<td>Human Geography (IAI S4900N)</td>
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<tr>
<td>GEO.110</td>
<td>World Regional Geography (IAI S4901)</td>
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<tr>
<td>HIS.105</td>
<td>American History to 1877 (IAI S2900)</td>
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<td>HIS.106</td>
<td>American Hist From 1877 (IAI S2901)</td>
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<td>HIS.125</td>
<td>Western Civilization 1 (IAI S2902)</td>
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<td>HIS.126</td>
<td>Western Civilization 2 (IAI S2903)</td>
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<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present (IAI S2920N)</td>
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<tr>
<td>MAT.109</td>
<td>Concepts of Mathematics (IAI M1904)</td>
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<tr>
<td>MAT.110</td>
<td>General Education Statistics (IAI M1902)</td>
<td>3</td>
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<td>MAT.131</td>
<td>Finite Mathematics (IAI M1906)</td>
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<tr>
<td>MAT.135</td>
<td>Calculus for Business Or Socia Sciences (IAI M1900-B)</td>
<td>4</td>
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<tr>
<td>MAT.210</td>
<td>Statistics (IAI M1902)</td>
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<td>MAT.240</td>
<td>Calculus With Analytic Geometry 1 (IAI M1900-1)</td>
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<tr>
<td>MAT.241</td>
<td>Calculus With Analytic Geometry 2 (IAI M1900-2)</td>
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<tr>
<td>MAT.242</td>
<td>Calculus With Analytic Geometry 3 (IAI M1900-3)</td>
<td>4</td>
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<tr>
<td>MUS.100</td>
<td>Music in the Western World (IAI F1900)</td>
<td>3</td>
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<tr>
<td>MUS.101</td>
<td>Introduction to American Music (IAI F1904)</td>
<td>3</td>
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<tr>
<td>MUS.105</td>
<td>Non-Western Music (IAI F1903N)</td>
<td>3</td>
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<tr>
<td>MUS.107</td>
<td>Music in the Theatre (IAI F1910)</td>
<td>3</td>
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<tr>
<td>MUS.205</td>
<td>Music and Society (IAI HF900)</td>
<td>3</td>
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<tr>
<td>PHL.100</td>
<td>Logic (IAI H4906)</td>
<td>3</td>
</tr>
<tr>
<td>PHL.101</td>
<td>Introduction to Philosophy (IAI H4900)</td>
<td>3</td>
</tr>
<tr>
<td>PHL.102</td>
<td>Ethics (IAI H4904)</td>
<td>3</td>
</tr>
</tbody>
</table>
Community College Partnership with Bellevue University

Carl Sandburg College and Bellevue University (Neb.) have entered into an Articulation and Community College Partnership. Any Carl Sandburg College student who attends Bellevue University and has earned their Associate Degree will have all of their credits accepted at Bellevue and will have all of their General Education requirements fulfilled but must satisfy the Kirkpatrick Signature Series requirement (specific to Bellevue University).

Chamberlain College of Nursing

Chamberlain College of Nursing is a not for profit Nursing college, offering degrees ranging from Bachelor’s degrees through Doctoral degrees in Nursing. Sandburg’s agreement offers students who receive their RN degree from Sandburg to transfer into their BSN program.

C.A.R.E.E.R. PROGRAM (Formerly Charge backs)

Carl Sandburg College participates in the Comprehensive Agreement Regarding the Expansion of Educational Resources (C.A.R.E.E.R.), which is an agreement signed by all of the Community College districts in Illinois (as of March 2017). Under the terms of the agreement, students may take advantage of career and technical education (CTE) programs at any other Illinois Community College if the program is not offered in their home district. The students benefit by paying the resident tuition and fee rates, despite living outside the Community College district.

Additional paperwork will need to be completed in the Student Services office on the Galesburg campus (E100).

Culver-Stockton College

Carl Sandburg College has signed an agreement with Culver-Stockton College (Canton, MO) designed to ease the concerns of Sandburg students who wish to transfer to Culver-Stockton. The partnership involves the articulation of all of Carl Sandburg's classes to a course equivalent at Culver-Stockton. This agreement should create seamless transfer opportunities for our students.

Eureka College Guaranteed Admission and the Uniquely Eureka Promise

Carl Sandburg College and Eureka College have entered an agreement which guarantees admission to Eureka College by meeting their admissions requirements. Sandburg classes have been articulated by the Eureka College registrar and the transferrable classes and their equivalents have been recorded. Starting with the Spring 2019 incoming class, Eureka will cover tuition for four semesters for all qualified, in-state transfer students. The Uniquely Eureka Promise is a full tuition program designed to give Illinois transfer students who have completed an associate degree from an accredited community college whom meet the eligibility requirements the opportunity to continue their education and gain a valuable college education.

Community College Alliance with Franklin University

The Community College Alliance (CCA) is a unique educational agreement between Carl Sandburg College and Franklin University of Columbus, Ohio. This agreement allows Carl Sandburg College graduates to complete a bachelor’s degree without leaving the Sandburg campus. After earning an associate degree or completing at least 60 transferable semester hours credit, students can earn a bachelor's degree through a combination of on-campus and online classes at Sandburg and online classes through Franklin University. There are 13+ majors in an online format that fit the students’ career and lifestyle needs without the barriers of time and location. Beyond the bachelor's degree, students may also...

### Study Abroad

Carl Sandburg College works in conjunction with the Illinois Consortium for International Studies and Programs (ICISP) and other Illinois community colleges in order to provide semester study abroad programs for its students to Canterbury, England; Carlow, Ireland; Salzburg, Austria; Seville, Spain; and Xi’an, China, and to offer summer study abroad to Salzburg, Austria; San Jose, Costa Rica; Dijon, France; Hyderabad, India. These programs are intended to provide students with a better understanding of the world via living and studying in different cultural environments around the world. Students reside with host families for all programs except Australia, China, and Ireland, where students stay in apartment or residence hall accommodations. For all programs requiring language courses, no prior experience is required. However, students with previous language experience will be tested and placed in the appropriate classes. During their study abroad, students are registered as Carl Sandburg College students and receive course credit directly through the College. Students are required to have a 2.75 or higher GPA, a "C" or better in English 101, and 12-15 hours of college credit in order to participate in ICISP Study Abroad programs. In addition to these regular opportunities, other opportunities for short term study abroad are available from year to year.

### Partnership Agreements

**ASU Online**

Carl Sandburg College has partnered with Arizona State University on a guaranteed admission program that simplifies the process for Sandburg students seeking to complete their bachelor's degree online or on campus through ASU. The guaranteed Program for Admission equips students with ASU tools and guidance on which courses to take their respective community college. ASU also will work with students to explore degrees, scholarships and other opportunities to enhance the completion of their bachelor's degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY.130</td>
<td>The Physical Universe (IAI P1906)</td>
<td>3</td>
</tr>
<tr>
<td>PHY.151</td>
<td>General Physics 1 (IAI P1900L)</td>
<td>5</td>
</tr>
<tr>
<td>POS.122</td>
<td>American Government &amp; Politics (IAI S5900)</td>
<td>3</td>
</tr>
<tr>
<td>POS.223</td>
<td>State &amp; Local Government (IAI S5902)</td>
<td>3</td>
</tr>
<tr>
<td>POS.228</td>
<td>International Relations (IAI S5904)</td>
<td>3</td>
</tr>
<tr>
<td>POS.267</td>
<td>Comparative Government (IAI S5905)</td>
<td>3</td>
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<tr>
<td>PSY.101</td>
<td>Introduction to Psychology (IAI S6900)</td>
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<tr>
<td>PSY.204</td>
<td>Social Psychology (IAI S8900)</td>
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<tr>
<td>PSY.206</td>
<td>The Social Psychology of Aging (IAI S6905)</td>
<td>3</td>
</tr>
<tr>
<td>PSY.265</td>
<td>Developmental Psychology (IAI S6902)</td>
<td>3</td>
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<tr>
<td>SOC.101</td>
<td>Introduction to Sociology (IAI S7900)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.102</td>
<td>Contemporary Social Problems (IAI S7901)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.103</td>
<td>Marriage and the Family (IAI S7902)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.105</td>
<td>Intro to Cultural Anthropology (IAI S1901N)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.201</td>
<td>Introduction to Anthropology (IAI S1900N)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.203</td>
<td>Introduction to Diversity (IAI S7903D)</td>
<td>3</td>
</tr>
<tr>
<td>SOC.260</td>
<td>Gender &amp; Society (IAI S7904D)</td>
<td>3</td>
</tr>
<tr>
<td>SPE.120</td>
<td>Introduction to Public Speaking (IAI C2900)</td>
<td>3</td>
</tr>
<tr>
<td>SSC.110</td>
<td>Global Issues (IAI S5904)</td>
<td>3</td>
</tr>
<tr>
<td>SSC.120</td>
<td>Statistics for Social Science (IAI M1902)</td>
<td>3</td>
</tr>
<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation (IAI F1907)</td>
<td>3</td>
</tr>
<tr>
<td>THE.111</td>
<td>Theatre History (IAI F1908)</td>
<td>3</td>
</tr>
</tbody>
</table>
pursue the Vantage MBA in a completely online format in as few as 17 months. For detailed information, please contact the Admissions Office.

**Dual Enrollment with Knox College**

Carl Sandburg College and Knox College have partnered on a dual enrollment program for students who intend to pursue a bachelor’s degree at Knox upon completing an associate degree at Sandburg. Students can apply for the dual admission program as early as their senior year in high school through the beginning of their sophomore year of college (30 semester hours). Students accepted to the program must maintain a minimum 3.0 cumulative grade point average.

**Illinois College**

Carl Sandburg College and Illinois College in (Jacksonville, IL) have an articulation agreement for students who wish to transfer to Illinois College upon completion at Sandburg. All of Sandburg’s transferrable classes have been articulated at Illinois College and those who receive their degree, with a qualifying GPA, will enter Illinois College at Junior status.

**Indiana Wesleyan University**

Indiana Wesleyan University is giving Carl Sandburg College students the opportunity to continue their education through online studies. The primary program in the partnership benefits those who are wishing to pursue their B.S.N. at Indiana Wesleyan but there are several other degrees available through the agreement.

**Monmouth College Pipeline Program**

Carl Sandburg College has partnered with Monmouth College to create a program for students who desire to obtain a Bachelor’s degree at Monmouth but earn their Associate’s degree at Carl Sandburg prior to transferring. The program allows for students to meet with advisors from both institutions each semester and allows students access to various events and facilities on the Monmouth College campus. Inquiries can be directed to the Welcome Center, at 309.345-3500 or welcomecenter@sandburg.edu.

**Dual Admissions with Saint Ambrose University**

Carl Sandburg College has entered into a dual admissions agreement, which permits students who intend to transfer to Saint Ambrose upon completion of their Associate Degree access to facilities, student events and other resources while attending Sandburg. Students must apply at both institutions upon entry into college and must work with an advisor from both institutions at the beginning of each semester.

**Transfer Agreement with University of Illinois at Urbana-Champaign (ACES)**

University of Illinois at Urbana-Champaign - Associate in Science Degree (Emphasis in Agriculture)

Carl Sandburg College and the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois at Urbana-Champaign (UIUC) have a cooperative agreement to help facilitate transfer students who wish to pursue a degree in one of the Agricultural Science programs at UIUC. Sandburg students who pursue the Associate in Science degree, with an emphasis in Agriculture, will be required to complete 12 semester hours of online work from UIUC and travel to their campus a couple of times per semester as part of their class requirements.

**University of Illinois-Chicago (TAG)**

The UIC Transfer Admission Guarantee program offers guaranteed admission into the University of Illinois at Chicago for students who are currently attending an Illinois Community College with an active TAG agreement and are planning to transfer into a participating UIC baccalaureate degree program. Students who actively participate in the TAG program will receive counseling and benefits that exceed those of a regular transfer student.

**Lincoln College**

Carl Sandburg College and Lincoln College have a partnership that provides an articulation agreement and a Guaranteed Admissions program that simplifies the transfer process for Sandburg students seeking to complete their bachelor’s degree at Lincoln College. Sandburg graduates with an Associate in Arts (AA) or Associate in Science (AS) will have met all general education requirements for Lincoln College-Normal. Also, Sandburg graduates with an AA, AS or Associate in Applied Science (AAS) degree who meet the requirements for Lincoln’s Accelerated Bridge to Education (ABE) program (at least 23 years old and a minimum of three years’ post-high school full-time employment) will be automatically admitted to Lincoln. Lincoln also will transfer in all credits from a Sandburg AAS degree for graduates who enroll in one of Lincoln’s AAS Capstone Degree programs (Bachelor of Applied Management in Entrepreneurship or Bachelor of Applied Science in Organizational Leadership).

**Saint Francis Medical Center College of Nursing**

Saint Francis College of Nursing is partnering with the Nursing department to offer five guaranteed seats into their BSN program after completing the RN degree at Carl Sandburg College. Sandburg students must meet certain GPA requirements to qualify for the program. For more information, please contact the Nursing office at 309-341-5299.

**BOT/BA Degree Program with Western Illinois University**

WIU Bachelor of Arts in General Studies program

Carl Sandburg College signed a partnership agreement with Western Illinois University (WIU) to facilitate the transfer of students who have earned or are pursuing an associate degree at Sandburg and who wish to enroll in the WIU Board of Trustees BA degree program. This flexible program enables the mature place-bound student to earn a bachelor’s degree with as few as 40 semester hours taken through WIU in an online format or on campus. Once a student is accepted into the BOT/BA program, the tuition and fees rate is frozen for four years (if the student maintains continuous enrollment). Although a major may not be earned, a minor may be achieved by completing the exact academic requirements listed in the WIU Undergraduate Catalog. For detailed information, please contact the Admissions Office.
TUITION & FINANCIAL ASSISTANCE

Tuition and fees are subject to change without notice.

Tuition

Tuition for District Residents
Students who reside in the Community College District 518 are charged at an in-district rate per semester hour for tuition. Click here for the current tuition rate. (http://www.sandburg.edu/Services/Business-Office/Tuition-and-Fees.html)

Tuition for Out-of-District Residents
Students who are residents of Illinois but who live outside of Community College District 518 pay a higher tuition rate. Click here for the current tuition rate. (http://www.sandburg.edu/Services/Business-Office/Tuition-and-Fees.html)

Tuition for Out-of-State Residents
All students who do not maintain a legal residence in the State of Illinois pay a higher tuition rate. Click here for the current tuition rate (http://www.sandburg.edu/Services/Business-Office/Tuition-and-Fees.html).

International Student Tuition
International Students who attend Carl Sandburg on an F-1 Visa are charged the International Student Tuition rate. International students are limited to one online class per semester. Students are required to pay tuition in full by the current tuition rate. (http://www.sandburg.edu/Services/Business-Office/Tuition-and-Fees.html)

Proof of Residence
Students who move from outside the state or district and who obtain residence in the state or district for reasons other than attending the community college shall be exempt from the 30-day requirement if they demonstrate through documentation a verifiable interest in establishing permanent residency. Students must be able to provide one or more of the following:

1. Voter registration in District 518
2. Evidence of tax, utility, or rent receipt, or a signed lease contract in District 518
3. Driver’s license and/or vehicle registration showing an address in District 518
4. Other documentation which can help certify residency in District 518

A student who resides with his or her parents or guardian in Community College District 518 is a resident student. An emancipated student who is completely self-supporting and who has resided in Community College District 518 for at least 30 days prior to the beginning of the semester at Carl Sandburg College shall be considered a resident of the District. Students who are enrolled in an approved cooperative program between Carl Sandburg College and another college may be eligible to receive in-district rates. Students who qualify under other ICCB regulations are eligible to receive in-district tuition rates. Students cannot qualify for in-district tuition rates while on a temporary visa.

Tuition Waivers for Senior Citizens
District 518 residents 65 years of age or older are permitted to participate in credit-bearing courses at no charge for tuition (No Credit Awarded), provided there are spaces in the classes and that tuition-paying students constitute the minimum number required for enrollment in those classes. Verification of age is required by presenting an Illinois driver’s license or other appropriate documentation at the time of enrollment. Payment is required for all fees, books and supplies.

C.A.R.E.E.R. PROGRAM (Formerly Charge backs)
Carl Sandburg College participates in the Comprehensive Agreement Regarding the Expansion of Educational Resources (C.A.R.E.E.R.), which is an agreement signed by all of the Community Colleges districts in Illinois (as of March 2017). Under the terms of the agreement, students may take advantage of career and technical education (CTE) programs at any other Illinois Community College if the program is not offered in their home district. The students benefit by paying the resident tuition and fee rates, despite living outside the Community College district.

Additional paperwork will need to be completed in the Student Services office on the Galesburg campus (E100).

Payment of Tuition and Fees
Students may pay tuition and fees in cash, by check, or debit/credit card. The College accepts VISA, MasterCard, Discover, or American Express for tuition and fees payment. Credit card payment may also be used for Phone and Online Registration. For a small fee, students enrolling in semester classes can defer a portion of their tuition and fee charges (see Deferment Policy below). Check with the Sandburg Business Office for current rates.

Deferment Policy
An interest-free monthly payment plan through Nelnet Business Solutions (formerly FACTS Management Co.) is available. This monthly payment plan enables you to spread tuition payments equally over several months without interest or finance charges. By paying monthly, you limit borrowing and keep the overall costs of education down. The monthly payment plan is available to all families regardless of financial need. There is a minimal enrollment fee to cover administrative costs. The registration for the Monthly Payment Plan will be via the Internet and students must possess either a debit/credit card or maintain a checking or savings account from which to withdraw the payments. Nelnet accepts MasterCard, Visa, Discover and American Express.

Refund Schedule
Tuition refunds will be issued to eligible students based upon effective date of withdrawals. The date that a written request for withdrawal is received by the Admissions and Records Office determines the effective date of withdrawal.

Full refund of tuition and fees will be made if the College cancels a course.

Refunds will be determined on the basis of the following schedule:

<table>
<thead>
<tr>
<th>Length of Class</th>
<th>Refund Period*</th>
<th>% Refund</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-16 Weeks</td>
<td>1st 9 calendar days of term</td>
<td>100%</td>
</tr>
<tr>
<td>5-8 Weeks</td>
<td>1st 5 calendar days of term</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Refund Periods are as follows:
- 5-8 Weeks
- 9-16 Weeks
- 20 or more weeks
Important Note for Financial Aid Recipients – Return of Title IV Policy

Federal financial aid (Title IV student aid) funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of Title IV funds that the student was originally scheduled to receive. When a student receiving Title IV student financial aid withdraws from all courses, the aid must be adjusted in accordance with rules established by the U.S. Department of Education. These calculations may result in the student owing an institutional balance. Students who do not complete at least 60% of a period of enrollment may be required to return federal student aid received. These rules apply to both students who formally withdraw from classes as well as students who receive a zero grade point average (GPA) (grades of "W" and "F") for a semester and/or any period of enrollment less than a semester if enrolled in four- or eight-week courses.

The last date of attendance is determined to be the withdrawal date or the last recorded date of activity as documented by the institution. If the student ceases attendance without providing official notification of withdrawal to the institution, the mid-point of the payment period or period of enrollment, or the last recorded day of activity will be the withdrawal date for the purpose of returning Title IV funds. A copy of this policy is available in the Financial Aid Office. If you have any questions about how this law may affect you, please contact the Financial Aid Office.

Obligations to the College

Students must meet all financial obligations to the College and return all materials owned by the College before they will be allowed to re-register and to receive grade reports, diplomas, certificates, and transcripts. If you should have any uncollected balances, we may use any and all means necessary to collect this debt in accordance with state and federal laws.

Financial Assistance

Carl Sandburg College participates in federal, state and institutional financial aid programs to assist students in meeting the costs of higher education. Financial aid is available in the form of grants, loans, scholarships and work study.

IMPORTANT: FAFSA APPLICATION PROCESS BEGINS OCTOBER 1

How to Apply for Financial Aid

1. Apply for admission to Carl Sandburg College. Online Application (http://www.sandburg.edu/Admissions/Applying%20To%20Sandburg/apply.html)

2. Create an FSA ID for the student and parent (if dependent). This is a one-time process; however your password will need to be updated every 18 months. The FSA ID gives you access to Federal Student Aid’s online systems and will serve as your legal signature. Create an FSA ID (http://fsaid.ed.gov/nypass). The following video is helpful in understanding the requirements to set up an FSA ID. Instructional Video - How to Create an FSA ID (https://www.youtube.com/watch?v=K7ihhGk8mCY).

3. Complete the Free Application for Federal Student Aid (FAFSA). Sandburg’s Federal School code is 007265. You may complete the FAFSA online via the internet at www.fafsa.gov (http://www.fafsa.gov). The FAFSA is used to award federal, state and some institutional aid.


5. Complete and submit any Required Documents on My Financial Aid.

6. Continue to monitor your mySandburg account for additional requests. Once processing is complete we will email your Sandburg email account and post your award letter on Financial Aid Self Service.

7. After your award letter has been posted, you may apply for a student loan if it shows you are eligible. To apply for a loan, complete the three steps found under 'Apply for Federal Student Loan'. (http://www.sandburg.edu/Services/Financial-Aid/Loans)

Standards of Academic Progress

Students receiving financial aid are required to meet Satisfactory Academic Progress (SAP) standards according to federal and state regulations. Academic records are reviewed for all students receiving financial aid and those being considered for financial aid from the following sources: Federal Pell Grant, Federal Work Study Program, Federal Supplemental Educational Opportunity Grant, Illinois Monetary Award Program (MAP), Federal Direct Parent PLUS Loan, and Federal Direct Stafford Loan (Subsidized and Unsubsidized). The student’s status is evaluated at the end of each semester.

Students will be considered to have an eligible SAP status if they:

- Maintain a cumulative grade point average (GPA) of 2.0 or better
- Satisfactorily complete 67% or more of credit hours attempted
- Graduate within 150% of the credit hours required to complete the student’s program

A student who has not met the minimum GPA requirement of 2.0 or higher, or has not completed the minimum credit hours will be assigned a classification of Financial Aid Warning for one semester. If a student does not meet SAP requirements at the conclusion of the Financial Aid Warning semester, the student will be placed on Financial Aid Dismissal. A student on Financial Aid Dismissal is no longer eligible for financial aid.

A student who is on Dismissal can regain eligibility for financial aid by fulfilling one of the following conditions:

1. Eliminate all academic deficiencies by completing the number of credit hours necessary, at the student’s own expense, to meet the 67% completion requirement and attain the minimum 2.0 cumulative GPA.

2. Submit an appeal for reinstatement of financial aid.

*Refund period refers to the number of calendar days beginning with the first day of the term.*
3. Students who appeal may be granted an Academic Improvement Plan where they can continue to receive financial aid to complete their program as long as they meet the terms of the plan.

**Academic Improvement Plan**
Students who appeal and who need more than one semester to complete their academic goals, may be reinstated under an Academic Improvement Plan. This plan requires that students meet the following stipulations each semester until they attain good standing:

- Successfully complete 75% or more of credit hours attempted each semester
- Obtain a semester GPA of 2.2 or higher each semester

Students who fail to meet any of the above requirements while under the Academic Improvement Plan will be placed on Dismissal.

The complete SAP policy, including examples, is available on the College website or by visiting the Financial Aid Office.

**Developmental Hours**
A student is limited to 30 developmental credit hours while receiving financial aid. Federal financial aid will not cover any developmental courses taken after the student has reached the maximum 30 hours. Developmental courses are below 100. For more information contact the Financial Aid Office at 309-341-5283.

**Repeated Courses**
Students may receive financial aid for repeating courses where they received a grade of 'W' or 'F'. Financial Aid can be used one time to repeat a previously passed course. For Satisfactory Academic Progress status, each repetition will count toward the enrolled hours; however, only the course(s) being counted in the GPA calculation will be counted in completed hours for SAP.

Note: All information is subject to change based on changes to federal law, regulation, or College policy and procedure. If changes are made, students must abide by the new policy.

**Student Financial Assistance Programs**
(Unless otherwise specified, follow the steps under "How to Apply for Financial Aid" for the programs listed.)

For additional information about financial aid programs and eligibility, please visit our Financial Aid and Scholarship [page](http://www.sandburg.edu/Services/Financial-Aid/Financial%20Aid%20Programs%20and%20Scholarships).

**Grants**

**Federal PELL Grant**
Federal grants that offer from $657 - $6195 per year. Eligibility is based on financial need and enrollment.

**Federal Supplemental Educational Opportunity Grant (FSEOG)**
These federal grant funds are awarded by Carl Sandburg College based on need, income, and application date. Award amounts vary. Students must be Pell eligible to receive FSEOG funds.

**State of il Monetary Award Program (MAP)**
This is an Illinois program that will pay a portion of tuition, based on financial need. Illinois residency is required and students must be enrolled in at least three credit hours. Maximum award is $4108 per year.

**Student Loans**

**Federal Direct Loan**
The Federal Direct Loan Program is administered by the federal government and offers freshman students up to $3500 and sophomores up to $4500 per year. THIS MONEY MUST BE REPAID. You may qualify for a Subsidized Direct Loan and/or an Unsubsidized Direct Loan up to the maximum amounts listed above. Carl Sandburg College loan recipients must complete loan counseling prior to the first loan disbursement. To determine eligibility, you must apply for federal student aid as outlined in this Financial Aid section of the catalog.

Carl Sandburg College evaluates all loans on a case-by-case basis. Federal regulations allow an institution to refuse to certify a student loan or certify a loan amount that is less than the student's determination of need. Students will be notified in writing of the institution's decision. Carl Sandburg College will not discriminate against any borrower or applicant in obtaining a loan on the basis of race, national origin, religion, sex, marital status, age, or disability status. Loan checks are distributed 30 days after each semester begins. Students who are placed on Financial Aid Warning or Probation or Academic Improvement Plan may be denied student loans.

**Subsidized Direct Loan**
These loans are based on financial need; therefore, all students may not qualify. With a Subsidized Direct Loan, no interest accumulates and no repayment is required as long as the student is enrolled in college at least half-time. Students have six months after they drop below half-time before repayment is required and interest begins to accrue. To find out the current interest rate, please go to [https://studentaid.ed.gov/types/loans/interest-rates](https://studentaid.ed.gov/types/loans/interest-rates).

**Unsubsidized Direct Loan**
Students who do not qualify for maximum Subsidized Direct Loans may borrow up to the maximum amounts above less Subsidized Loans through the Unsubsidized Direct Loan program. To find out the current interest rate, please go to [https://studentaid.ed.gov/types/loans/interest-rates](https://studentaid.ed.gov/types/loans/interest-rates).

**Federal Direct PLUS Loans**
A loan in which parents of dependent students may borrow to pay for educational expenses. Family income is not taken into consideration; therefore, the program is open to almost any family who qualifies based on credit. The family can borrow up to the cost of education, less other aid received. To find out the current interest rate, please go to [https://studentaid.ed.gov/types/loans/interest-rates](https://studentaid.ed.gov/types/loans/interest-rates)

**Other Programs**

**Federal Work-Study Program (FWS)**
These federal funds are awarded to students interested in working to help meet their financial need. An FWS award allows the student to work on campus to earn money. An award does not guarantee a job will be available or that the student will earn the entire award.

**Western Illinois Works**
Persons who are interested in training/retraining may consider applying for WIA. For more information contact your local WIA Office:

- **Hancock County**
  550 N. Madison
  Carthage, IL 62321
  217.357.6749

- **Knox County**
  311 East Main Street, Suite 612
Galesburg, IL 61401  
309.343.9832  
McDonough County  
440 North Lafayette  
Suite 110  
Macomb, IL 61455  
309.837.1280  
Warren County  
1025 S. 2nd  
Monmouth, IL 61462  
309.734.4745  

**Department of Rehabilitation Services (DORS)**  
Financial Assistance is available, as a grant, for students with a disability which is considered a substantial vocational handicap to employment. For additional information contact your local DORS office. The Galesburg office is located at 477 E. Main St., Suite A, Galesburg, IL 61401, or phone 309.343.2193.

**College-Sponsored Programs**

**Carl Sandburg College Foundation Scholarships**  
Carl Sandburg College Foundation establishes and cultivates transformative relationships for support of Sandburg students, programs and capital needs. A volunteer board of directors governs the Foundation, providing policy direction for the non-profit, 501(c) (3) tax-exempt organization established to secure additional funds for the College. Contributions to the Foundation provide scholarships and financial support that enable Carl Sandburg College to offer more programs and enhance what is already an outstanding institution of higher education. Contributions are accepted from our generous giving community comprised of individuals, businesses, organizations and foundations. These combined resources enhance the College’s educational mission of providing all students with opportunities for success.

The Foundation provides academic, program-specific, veterans, financial need, and geographic-based scholarships. These scholarships support Sandburg students of all ages in occupational and transfer curricula. Scholarship awards are based on individual scholarship guidelines. Distribution of payment is determined solely by the Foundation’s Scholarship Review Committee and is not subject to change by outside departments.

For further information regarding scholarships, please contact the Foundation Office or the Financial Aid Office on The Main Campus. At The Branch Campus, contact the Coordinator of Branch Campus Support Services.

Visit the Foundation Scholarship (http://www.sandburg.edu/Services/Financial-Aid/Foundation-Scholarships) web site or go to your mySandburg (http://www.sandburg.edu/mySandburg) account and select “Scholarship Application” to apply.

**Other Forms of Assistance**

**Presidential Scholarships**  
Full-tuition scholarships will be available for students with an ACT score of 27 or higher or SAT score of 1280 or higher AND a grade point average of at least 3.75. Recipients must maintain a cumulative college GPA of 3.5 each semester for renewal.

Half-tuition scholarships will be available for students with an ACT score of 25 or higher or SAT score of 1200 or higher with at least a 3.5 GPA. Recipients must maintain a cumulative college GPA of 3.25 or higher each semester for renewal.

The award is tentatively based on a student's sixth- and seventh-semester high school transcripts, and the final award will be contingent on the student meeting all requirements with his or her final high school transcript.

The full scholarship will be awarded to a maximum of 20 students on a first-come, first-served basis and will pay up to 64 credits over two years at Sandburg as long as the student maintains the required cumulative GPA. **Applications are accepted the year you graduate from high school and limited to accredited high schools within the Sandburg district.**

**Talent Scholarships**  
Talent Scholarships are available for students with exceptional talent in the areas of creative writing, journalism, music, theatre, art, or athletics. Students may receive a scholarship waiving in-district tuition for up to 18 credit hours per semester. Recipients are selected by the Student Services. Interested students should contact the Vice President of Student Services Office for details.

**Crisis Grants/Loans**  
Carl Sandburg College Foundation offers emergency financial assistance for Sandburg students in crisis experiencing a non-academic, non-recurring expense that jeopardizes the applicant’s ability to remain enrolled at Carl Sandburg College. A one-time crisis grant or loan could be approved if the student meets all the eligibility requirements, subject to available funding. (Student must document their financial crisis and submit a letter explaining specific circumstances.) For information, students should request a Crisis Grant/Loan application from the Foundation Office. If eligible, students will receive a response within 72 hours.

**Veterans’ Assistance**  
State and Federal assistant is available at Carl Sandburg College for qualified veterans, military personnel and the children and spouses of veterans who died or are permanently and totally disabled as the result of a service-connected disability. For information on eligibility, contact the Coordinator of Veterans and Military Personnel Student Services in the Financial Aid Office. Academic programs listed in the catalog as “Pending ICCB Approval” are not eligible for VA Certification until the approval is received from ICCB and approved by the Department of Veterans Affairs.

**Certification Information**

- Students receive VA educational benefits only for those courses that apply to their declared academic major.
- Students receiving educational benefits from the VA must complete all of the semester hours for which they are certified. Students who do not complete their semester hours may be responsible to repay funds to the VA received for that semester.

**STUDENT CALL TO MILITARY DUTY**  
Carl Sandburg College students who are called to active duty in the armed forces will, upon their request, be given a 100 percent refund of tuition and fees for the current term if they provide the Records and Registration Office with (1) a written request (letter or Schedule Change Form) to be withdrawn from classes at 100 percent refund and (2) a copy of their official orders for a call to active duty. If the call to active duty comes after mid-term, the student may (1) request to be withdrawn from classes at 100 percent refund, (2) try to complete courses in progress
after consulting with the instructors, or (3) request incomplete grades ("I") after consulting with the instructors.

**Tuition for Eligible Veterans and Families**

In-district tuition will be charged to eligible Post 9/11 Veterans, spouses, and/or children and Montgomery GI Bill Recipients regardless of residency. Check with the Coordinator of Veterans and Military Personnel Student Services with any questions.

**STATE ASSISTANCE**

The State of Illinois provides tuition assistance to veterans through the Illinois Veteran Grant and to military personnel through the Illinois National Guard Scholarship. Eligible veterans and/or military personnel will receive credit for full tuition and for registration fees for approved courses at any Illinois state-controlled college, university or community college. To maintain eligibility for either of the grants listed above, students must maintain a 2.0 grade point average and meet any other eligibility requirements.

**ILLINOIS NATIONAL GUARD**

Illinois National Guard grant pays tuition and certain fees for students who have completed one year of service and who are current members of the National Guard. The student must be an Illinois resident and have a grade point average 2.0 or higher. Eligible students must re-apply for Illinois National Guard grant each year. Eligibility is limited to eight semesters of full-time attendance. Apply online at [http://www.isac.org/students/during-college/applying-for-financial-aid/applications/index.html](http://www.isac.org/students/during-college/applying-for-financial-aid/applications/index.html).

**ILLINOIS VETERANS GRANTS (IVG)**

Illinois Veterans Grant pays tuition and certain fees for students who qualify. The student must:

1. be a veteran, of the armed services
2. have resided in Illinois six months before entering the armed services,
3. have at least a year of active duty and receive an honorable discharge,
4. return to Illinois within six months after discharge from the service,
5. maintain a grade point average of 2.0 or higher.

The Illinois Veteran Grant (IVG) application is available online as an interactive application via the Student Portal. The online application has many benefits, including program information which is available at your fingertips, online edits which prevent errors, elimination of mailing time, and immediate confirmation that your application has been received at ISAC. Apply online at [http://www.isac.org/students/during-college/applying-for-financial-aid/applications/ivg_applying/index.html](http://www.isac.org/students/during-college/applying-for-financial-aid/applications/ivg_applying/index.html)

**Federal Assistance**

The Veteran's Administration offers a variety of federal entitlement programs through the GI Bill and other VA programs. Eligible veterans may receive a monthly check to cover school-related and other expenses while attending college in an approved program of study.

**FOREVER GI BILL - HARRY W. COLMERY VETERANS EDUCATIONAL ASSISTANCE ACT OF 2011**

The President signed into law the Harry W. Colmery Veterans Educational Assistance Act also known as the "Forever GI Bill," which will bring significant changes to Veterans education benefits. The law is named after the American Legion national commander who wrote the original GI Bill language in 1944, and will allow more Veterans to use the GI Bill and more time to use it. Some of the changes will go into effect immediately, most will not. The majority of the changes enhance or expand education benefits for Veterans, Service members, Families and Survivors. For more information, visit the US Department of Veteran Affairs - Forever GI BILL at [http://www.benefits.va.gov/GIBILL/ForeverGIBILL.asp](http://www.benefits.va.gov/GIBILL/ForeverGIBILL.asp).

**THE POST-9/11 VETERANS EDUCATION ASSISTANCE ACT OF 2008**

The Post-9/11 GI Bill is a benefit providing educational assistance to individuals who have served on active duty after September 10, 2001. For specific information regarding eligibility requirements, the length for which assistance is available, and the amount of the entitlement allotment, please visit [http://www.benefits.va.gov/benefits/](http://www.benefits.va.gov/benefits/). Click on 'Education and Training'.

**Elimination of 15-year Limitation to use the Post-9/11 GI Bill Program**

The law removes the time limitation for the use of Post-9/11 GI Bill benefits for individuals whose last discharge or release from active duty is on or after January 1, 2013, children of deceased Servicemembers who first become entitled to Post-9/11 GI Bill program benefits on or after January 1, 2013, and all Fry spouses. All others remain subject to the current 15-year time limitation for using their Post-9/11 GI Bill benefits.

**Monthly Housing Allowance**

The law requires the monthly housing allowance (MHA) under the Post-9/11 GI Bill program to be calculated based on the zip code of the campus where the student physically attends the majority of classes, rather than the location of the institution of higher learning where the student is enrolled. This applies to the first enrollment in an educational program on or after August 1, 2018. Carl Sandburg College in Galesburg zip code is 61401 and in Carthage is 62321.

**The Montgomery GI Bill, Active Duty, Chapter 30**

Veterans who possess an honorable discharge may be eligible to receive up to 36 months of educational benefits through this program. The monthly benefits a veteran may receive is based on the veteran's military training, category, length of service, and any applicable "kickers" provided by the Department of Defense. Most eligible veterans are permitted 10 years from the point of discharge to use his/her benefits; however, exceptions may exist that could shorten or extend that period of entitlement. For specific information, visit [http://www.benefits.va.gov/benefits/](http://www.benefits.va.gov/benefits/). Click on 'Education and Training'.

**The Montgomery GI Bill, Selected Reserve, Chapter 1606**

Montgomery GI Bill - Selected Reserve program is for members who are actively participation in the Selective Reserve. The selected reserve include the Army Reserve, Navy Reserve, Air Force Reserve, Marine Corps Reserve, Coast Guard Reserve, the Army National Guard, and the Air National Guard. Eligible reservists may receive up to 36 months of educational benefits through this program. In certain cases involving mobilization, the period of eligibility may be extended. For specific information, visit [http://www.benefits.va.gov/benefits/](http://www.benefits.va.gov/benefits/). Click on 'Education and Training'.

**Reserve Educational Assistance Program (REAP)/Chapter 1607**

REAP is an educational benefit program designed to provide educational assistance to members of the Reserve components called or ordered to active duty in response to a war or national emergency (contingency operation) as declared by the President or Congress.

**Change in REAP Eligibility**

The National Defense Authorization Act of 2016 ended REAP on November 25, 2015. Some individuals will remain eligible for REAP benefits until November 25, 2019, while others are no longer eligible for REAP benefits.

The Post 9/11 GI Bill in many ways has replaced REAP because it also provides educational assistance benefits for Reserve and National Guard...
members called to active duty after September 10, 2001, and in many cases provides a greater benefit than REAP. For specific information, visit https://www.benefits.va.gov/benefits/. Click on ‘Education and Training’.

REAP Eligibility Credited Toward Post-9/11 GI Bill Program
Members of the Reserve who established eligibility to educational assistance under the Reserve Educational Assistance Program (REAP) before November 25, 2015, and lost it due to the sunset provision may elect to have that service credited towards the Post-9/11 GI Bill program.

Chapter 31
Vocational Rehabilitation for Veterans with Service-Connected Disabilities. If it is determined that you are classified as a Service-Disabled Veteran, you may be eligible to receive assistance with the cost of tuition, fees, books, equipment and supplies at an approved college or university. For specific information, please visit https://www.benefits.va.gov/voc rehab/index.asp

Chapter 32 (VEAP)
The Veteran’s Administration provides financial assistance for Post-Vietnam era veterans through the Veterans’ Educational Assistance Program (VEAP). To be eligible, veterans must have entered active duty on or after January 1, 1977 and before July 1, 1985 and have contributed to the educational fund before April 1, 1987.

Chapter 35
Dependents Educational Assistance is for eligible children and spouses of Veterans who died or are permanently and totally disabled as a result of a service-connected disability. For specific information, visit https://www.benefits.va.gov/benefits/. Click on ‘Education and Training’.

Carl Sandburg College Standards for Veterans’ Satisfactory Progress
Carl Sandburg College students who are receiving federal educational benefits through the Veteran’s Administration (VA) must make Satisfactory Progress in order to continue receiving benefits. This applies to Illinois Veteran’s Grant (IVG), National Guard (NG), Chapter 30, 31, 33, 35, 1606, and 1607 benefits.

VA Satisfactory Progress requires the student to maintain a cumulative GPA of 2.0 or greater. Students who fall below a 2.0 GPA will be placed on Warning. Students on Warning will have one semester to raise their cumulative GPA so that it satisfies the requirement. Students who do not satisfy the cumulative GPA after the warning period will be placed on Carl Sandburg College VA Dismissal and will no longer qualify for VA educational benefits.

Students will go back to satisfactory status when their cumulative GPA rises to a 2.0 or above. Students placed on Carl Sandburg College VA Dismissal may file a written appeal to reinstate their benefits for an additional semester. Appeals are to be completed by the student and returned to the Coordinator of Veterans & Military Personnel Student Services in the Financial Aid Office. Appeals will be reviewed by the Veterans satisfactory progress committee within 30 calendar days. Students are encouraged to file their appeals early to avoid disruption in benefits.
ACADEMIC INFORMATION

Academic Credit

Credit Earned at Carl Sandburg College
The unit of credit measure is the semester hour which approximates the effort expended in 50 minutes of class work and 100 minutes of study during each week of the semester.

Credit for Courses Completed at Other Colleges and Universities
Credit will be granted for courses taken at other accredited institutions in which the student has earned a grade of "C" or better. Credit also will be awarded for courses in which a grade of "D" has been earned, providing the student's overall average from the institution is a "C" or better, unless otherwise stated by specific Carl Sandburg College program requirements. Transfer credit is evaluated and awarded by the Admissions and Records Office.

Credit will be granted toward specific Associate in Applied Science and vocational certificate programs through articulation agreements with Delabar Vocational Education System and Western Area Career System. Check with the Admissions and Records Office for specific applications.

The College will accept as transfer credit all appropriate hours earned at accredited institutions. Regardless of the number of hours accepted, a student must meet the College's residency requirement for graduation. See "Graduation Policies and Procedures" for additional information regarding residency. The Admissions & Records office will evaluate the academic program that was listed on the application to the College. Students may change their academic program at any time with the Admissions & Records office.

Credit for Military Service
Credit for 3 semester hours of physical education and 3 semester hours of health education credit will be awarded to members or former members of the U.S. Armed Forces who have completed six months or more of basic or recruit training and have been honorably discharged or have transferred to the reserve component (includes the Army, the Air National Guard, and the Coast Guard). To receive this credit, the student must submit a petition to the Admissions and Records Office along with separation papers (DD214).

Certain experiences in military service may be submitted to the Admissions and Records Office for evaluation. The recommendations contained in "A Guide to the Evaluation of Educational Experiences in the Armed Services" by the American Council on Education in accepting CLEP program requirements. Transfer credit is evaluated and awarded by the Admissions and Records Office.

Credit may be given for coursework applicable to a Carl Sandburg College curriculum which was taken through the Defense Activity for Non-Traditional Education Support (DANTES) or under the United States Armed Forces Institute (USAFI), provided the course is recommended by the American Council on Education. The student must submit official transcripts of satisfactory completion of the work to the Admissions and Records Office.

Credit for College Level Examination Program
The College recognizes undergraduate achievement as measured by both the general and subject examinations of the College Level Examination Program (CLEP). Scores may be submitted to the Admissions and Records Office for evaluation, and if the level of achievement is at or above the minimum standards and score levels established by the College, credit may be granted. Carl Sandburg College follows the guidelines of the American Council on Education in accepting CLEP credit. Students may earn up to 24 hours of credit from the general examinations of the College Level Examination Program in the areas of humanities, mathematics, natural sciences and social sciences. In addition, many of the CLEP subject examinations may be accepted for credit based upon the score recommendations of the American Council on Education.

Students should discuss the CLEP options with a Student Services counselor prior to registering for any of the examinations.

Regardless of the number of hours earned through CLEP, the student must meet the College's residency requirement for graduation. See "Graduation Policies and Procedures" for additional information.

NOTE: If results of CLEP examinations are to be sent to another school for credit recognition, students are advised to check with the transfer school to determine its policy toward credit by examination.

Departmental Proficiency Examinations
Students may receive credit for a course at Carl Sandburg College by passing institutional proficiency examinations with a grade of "C" or better. The decision as to whether or not any particular course may be eligible for proficiency is made by the instructional department offering the course. The fee for each proficiency exam is equivalent to the cost of CLEP exams. Regardless of the number of hours earned through proficiency exams, a student must meet the College's residency requirement for graduation. See "Graduation Policies and Procedures" for additional information. Additional information about proficiency examinations may be obtained from the Admissions and Records Office.

Advanced Placement Program
This program and associated tests are offered only in high schools. Students who have participated in the AP program may be eligible to receive credit and advanced placement on the basis of tests in certain subjects determined by Carl Sandburg College.

Students wishing such credit or placement should request the College Entrance Examination Board to send their AP scored examinations to the Admissions and Records Office. Upon notification from the Registrar, students can then have any credit which was awarded placed upon their transcript.

Additional Credit Information
For additional information on what other credit types Carl Sandburg College accepts, please visit our Credit Granting Guide (http://sandburg.edu/Services/Registrar/Assets/credit-granting-guide-17-18-8-17.pdf). If you have additional questions about what credit Carl Sandburg College accepts, please call 309-341-5233.

Illinois Community Colleges Online
Illinois Community Colleges Online (ILCCO) is a consortium of Illinois community colleges working together to provide leadership, facilitate collaboration and share resources in online and technology-enhanced education. This program allows students to enroll in online courses at other Illinois community colleges while maintaining their Sandburg enrollment status. Students will participate in another college's online course but will receive billing, financial aid and transcripts from Sandburg. Students can search for eligible ILCCO courses, by clicking on
Incomplete. Incomplete indicates that the student has, for acceptable reasons, been unable to complete the required work by the close of the semester. "I" is permissible only when the student has maintained a passing grade as revealed by the class record. An "I" must be changed by the instructor to an appropriate letter grade by mid-term of the following academic term or it will default to a grade of "F."

**Grades**

Grades are issued at the close of each academic term on a letter basis indicating quality of academic work. Grades issued by Carl Sandburg College are:

<table>
<thead>
<tr>
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<th>Description</th>
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</thead>
<tbody>
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<td>A</td>
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<tr>
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**Academic Dishonesty**

Students enrolling at Carl Sandburg College are responsible for learning what constitutes academic dishonesty. Carl Sandburg College defines the first three acts of academic dishonesty as proposed by Gary Pavela* (Kibler, et al, 1988, p. 1), the fourth is from Stony Brook University Library Research Guide** (SBU Library Research Guide, 2004).

- **Cheating** — Intentionally using or attempting to use work that is not your own, unauthorized materials, information or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.
- **Fabrication** — The intentional and unauthorized falsification or invention of any information for citation in an academic exercise.
- **Facilitating academic dishonesty** — Intentionally or knowingly helping or attempting to help another violate a provision of the institutional code of academic integrity.
- **Plagiarism** — Presenting the words or ideas of someone else as your own without proper acknowledgement of the source.

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**F** Failing work

**W** Withdrawal. No credit. Not calculated in grade point average.

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- **Plagiarism** — Presenting the words or ideas of someone else as your own without proper acknowledgement of the source.
The penalties for academic dishonesty may be severe. Students are advised to contact their instructors for policy clarification for a specific class.


TRANSCRIPTS

The Admissions and Records Office will make a copy of a student’s transcript (official academic or permanent record) when requested to do so. All requests for transcripts must be made in writing by the student. "Transcript Request" forms are available in the Admissions and Records Office and at http://www.sandburg.edu/Services/Registrar/Assets/new-transcript-form.pdf. No transcripts will be released without the written permission of the student. The College reserves the right to withhold transcripts of persons who have financial obligations with the College.

Transcript Evaluations

Official transcripts sent to Carl Sandburg College to be evaluated for transfer credit will be evaluated by program of choosing on admissions application. Results of transcript evaluation will be sent to current students MySandburg email only. For non current students transcript evaluation results will be sent via US mail. If your academic program changes after your initial choosing on application, please contact Angela Snow for a new evaluation for transfer credits. If you have further questions, please call Angela Snow at 309-341-5233 or asnow@sandburg.edu.

Academic Load

For purposes of certifying that a student is full-time academically, such student must be enrolled for at least 12 semester hours each semester and for at least six semester hours during a summer term. The normal academic load for students expecting to complete their degrees within a two-year period is 12-15 semester hours per term.

Classification of Student

Students are classified as follows:

<table>
<thead>
<tr>
<th>Class</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>0-29 semester hours</td>
</tr>
<tr>
<td>Sophomore</td>
<td>30 or more semester hours</td>
</tr>
<tr>
<td>Unclassified</td>
<td>Not pursuing a specific educational program</td>
</tr>
</tbody>
</table>

Repeating Courses

A student who receives a "D" or "F" in a course may repeat the course once. Only the higher grade will be computed in the grade point average. Please be aware that financial aid may not pay for repeated courses. NOTE: Students planning to transfer to another college or university are cautioned that the receiving institution may use all grades earned in computing a grade point average for admission purposes.

Auditing Courses

Students may audit courses. In such cases, grades of "T" will be assigned. This grade does not grant credit nor is it calculated in the grade point average. Students wishing to audit a class will be required to pay full tuition and fees for the class.

Students will be admitted to classes on an audit basis on a space-available status only. Students enrolling for credit will be given registration priority over students desiring to audit a course. Students may register to audit a course only during Late Registration (after the class has begun).

Students may change from "credit" to "audit" in a course from the first day of the class through the midterm date for that class. Students may, with permission from the instructor, change from "audit" to "credit" at any time prior to the midterm date for the class.

Auditing students are expected to attend class but are not required to submit assignments or take examinations.

Class Attendance

Students are expected to attend all regularly scheduled classes and are responsible for fulfilling the requirements of each semester. Individual instructors may set class attendance requirements that they consider to be reasonable and that are consistent with the objectives of the course. Instructors may assign final grades based, in part, upon class attendance.

Attendance/No-Show Policy

Effective Spring 2011: Students who do not attend class during the first four days of the semester will be dropped from the class.

Carl Sandburg College has a mandatory attendance policy for all classes. Non-attendance during the first four days of the semester/class will result in the class being dropped from your schedule. For online and self-paced courses, this means participating in the week one discussion and/or e-mailing your instructor. If you are unable to attend due to an emergency or conflict of a serious nature, you must contact your instructor. If an instructor is not designated, you should contact the Retention Specialist at 309.341.5338. If you are dropped from a course and wish to re-enroll, you will need instructor permission. Instructors have the right to deny you re-enrollment if the course is full or if it would be too late to make up missed work. If you decide to drop the class, it is your responsibility to verify that the course has been officially dropped from your class schedule and fees adjusted prior to the end of the 100% refund period.

Withdrawal from Courses

1. Students may officially withdraw from classes until the Tuesday of the 14th week of a 16-week calendar. See the Academic Calendar (p. 10) for withdrawal dates for terms less than 16 weeks.

Students who withdraw from classes prior to the first day or during the refund period may do so without notation on their permanent records (transcripts). After the refund period, students who withdraw from classes will receive a grade of "W" for those classes. This grade will not affect the grade point average. Refund dates are noted under the Tuition section of the catalog and are listed in the term’s Class Schedule.

To withdraw from a class, students must notify their Academic Advisor either in person, over the phone, through email or by completing a Class Schedule Change form of their intentions of withdrawing from any or all courses. The official date of withdrawal will be the date on which the form or letter is received by the Academic Advisor. Students who do not officially withdraw from a course will receive a grade of "F" for that course.

2. Instructor-Initiated Withdrawal: Instructors may withdraw students from classes at mid-term for non-attendance. Instructors may also drop students at mid-terms if the student’s progress is extremely poor.
preventing the student from passing the course. Instructor-initiated withdrawals will result in grades of "W".

3. Administrative-Initiated Withdrawal: The administration may withdraw students from classes for emergency or disciplinary reasons after due process. These withdrawals will result in grades of "W".

* Date is pro-rated based upon length of the term.

**Important Note for Financial Aid Recipients**

Students who withdraw or who receive instructor-initiated withdrawals from all of their courses prior to the 11th week of the semester and who received Federal Financial Aid (Pell Grant, SEOG, Direct Loans) to pay tuition, fees, books, or other institutional cost, will be responsible to repay part of the monies received. The College follows the federal requirements for Repayment of Title IV funds. A copy of this policy is available in the Financial Aid Office or the Business Office.

**Records Policy**

Procedure To Inspect Education Records: Students may inspect and review their education records upon request to the appropriate record custodian. Students should submit to the record custodian a written request which identifies as precisely as possible the record or records he or she wishes to inspect. The record custodian will make the needed arrangements for access as promptly as possible and will notify the student of the time and place where the record(s) may be inspected. Access must be given in 45 days or less from the receipt of the request. When a record contains information about more than one student, the student may inspect and review only the records which relate to him or her.

The College’s policy regarding student records is intended to comply fully with the Family Educational Rights and Privacy Act of 1974. This Act was designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for correction of inaccurate or misleading data through formal and informal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office, Department of Education, Washington, DC 20202, concerning the alleged failures of Carl Sandburg College to comply with the Act. Copies of the College policy are available in the Admissions and Records Office.

Carl Sandburg College designates the following categories of student information as public or "directory information": student’s name, hometown, high school attended, full time, part time enrollment, approval candidacy for graduation, major field of study, enrollment status, dates of attendance, most recent education agency or institution attended, degrees, honors, and awards received, height and weight of student athletes, participation in officially recognized activities and sports.

The above information may be disclosed by the institution for any purpose at its discretion. However, currently enrolled students may withhold disclosure of these items by notifying the Admissions and Records Office in writing within the first fourteen days of classes each semester. Request for non-disclosure must be made each semester.

Questions concerning the Family Education Rights and Privacy Act may be referred to the Admissions and Records Office.

**Academic Notice & Separation Policy**

**Standards of Academic Progress**

Students must maintain at minimum a 2.0 cumulative grade point average (GPA) and complete at least 67% of the courses in which they enroll to demonstrate academic progress. Students are strongly encouraged to select classes carefully so that they may complete their academic program requirements within the recommended guideline of 150% of their program’s length.

**ACADEMIC WARNING**

Students will be placed on Academic Warning if their cumulative GPA falls below a 2.0 or if their cumulative completion rate of courses attempted drops below 67%. Students who are placed on Academic Warning must demonstrate progress towards degree completion during their next semester of enrollment by earning a semester GPA of 2.0 and a semester completion rate of 67%. Students who are placed on Academic Warning may continue to enroll in classes.

**Academic Notice**

Students previously placed on Academic Warning who fail to meet the Standards of Academic Progress will be placed on Academic Notice. Any student placed on Academic Notice must complete the next semester of enrollment with a 2.2 GPA and achieve a 75% semester completion rate to remain on Academic Notice. Students on Academic Notice and who meet the minimum GPA and completion requirements will be permitted to enroll in the upcoming semester even if the student’s cumulative GPA and cumulative completion rates remain below the required levels.

Students who have been placed on Academic Notice and who earn a semester GPA below a 2.2 and/or whose completion rate is below 75%, will be placed on Academic Notice II.

**Academic Notice II**

Students placed on Academic Notice II are allowed one additional semester to improve their academic standing. Students who fail to make significant improvements may be suspended from the college for the following semester and must appeal to be permitted to enroll for future classes.

Students placed on Academic Notice II are required to schedule a meeting with their academic advisor to re-evaluate and to revise the student’s existing academic plan. Students placed on Academic Notice II will be restricted from enrolling in no more than 12 credit hours per semester. A registration restriction will be placed on the student’s account so that additional courses may not be added. Students on Academic Notice II must complete the semester with a 2.2 GPA and achieve a 75% semester completion rate to remain on Academic Notice II. Students on Academic Notice II and who meet the minimum GPA and completion requirements will be permitted to enroll in the upcoming semester even if the student's cumulative GPA and cumulative completion rates remain below the required levels.

Students whose performance failed to improve will be placed on Academic Separation.

**Academic Separation**

Students placed on Academic Separation will be suspended from the college for one semester. A registration restriction will be placed on the student’s account to prevent any attempt to enroll while on Academic Separation which includes auditing of courses. Students who are
placed on Academic Separation at the end of the spring semester, will be suspended for both the upcoming summer and fall semesters.

If there are extenuating circumstances, a student may appeal the Academic Separation decision. The student may complete the Academic Separation Appeal Form to be considered for reinstatement by the committee. The student is strongly encouraged to schedule a meeting with their academic advisor to develop an academic improvement plan to accompany the appeal form.

At the conclusion of the separation period, students may complete an appeal for re-enrollment privileges. Students who choose to appeal must meet with their academic advisor in order to review and revise his/her academic plan and to complete the Academic Separation Appeal Form (ASAF). The student’s completed ASAF must include a detailed explanation of the changes that the student plans to make in order to satisfy the Standards of Academic Progress. This appeal will be submitted to the Student Services faculty committee for consideration.

If the ASAF appeal is granted, the student will be placed on Academic Notice II and must satisfy the requirements of that policy for the privilege of continued enrollment. The committee reserves the right to impose additional restrictions or conditions of reinstatement based on what they feel best supports the student’s academic success.

However, if the student’s appeal is denied, he/she may re-appeal if additional supporting documentation is available, if extenuating circumstances were a factor or after an appropriate time frame has passed as determined by the Student Services faculty committee.

Students who have been placed on Academic Separation for a second or subsequent semester or their appeal was denied by the Student Services faculty committee, may appeal to the Vice President of Academic Services or the Vice President of Student Services. Students who wish to pursue this option must notify the Dean of Student Success in writing of their intent to appeal. The student has the right to submit any additional supporting documentation if available to add to their previous appeal documentation. The decision of the Vice President is final. Further appeals will not be considered until the student can prove substantial academic progress from another institution. Substantial academic progress is defined as a minimum requirement of at least 12 degree/credit hours completed in two consecutive academic years with a minimum of a 2.25 grade point average.

**ACADEMIC HONORS**

A Dean’s List and Honors List are published after each semester to recognize the academic achievements of our full and part-time students. To qualify for these honors, all students must complete a minimum of 12 semester hours of college credit courses (developmental courses do not qualify). Full-time students have earned 12 or more college-level credit courses in a term. Part-time students have earned 6-11 college-level credit courses in a term.

**Dean’s List**
Full-time students who have earned a semester grade point average of 3.5 or better.

**Part-time Dean’s List**
Part-time students who have earned a semester grade point average of 3.5.

**Honors List**
Full-time students who have earned a semester grade point average of 3.0 - 3.49.

**Part-time Honors List**
Part-time students who have earned a semester grade point average of 3.0 - 3.49.

**Graduation Policies and Procedures**

It is the responsibility of the student to know and to observe the requirements of his/her curriculum and the rules governing academic work. Although the advisor will attempt to help the student make wise decisions, the final responsibility for meeting the requirements for graduation rests with the student. If the student is currently enrolled at Carl Sandburg College, they can apply online to graduate under WebAdvisor.

Degree and certificate requirements stated in the Carl Sandburg College catalog will remain in effect for five academic years beginning with the student’s initial enrollment in a given academic program. If changes occur in graduation requirements subsequent to initial enrollment, the student may elect to graduate under the most recent degree or certificate requirements. If more than five years have passed since the student’s initial enrollment and the courses are still available, the student may continue their program requirements based on their entry year. If the courses in the student’s original program have been discontinued, the student must choose a more recent degree plan (within five years).

Students who are pursuing a program with selective admission must be readmitted to the program and meet the requirements as determined by the certification of their field of study.

In addition to fulfilling the course requirements for individual academic programs as stated by the College, students who intend to graduate from Carl Sandburg College must meet these requirements:

1. File a petition for graduation in the Admissions and Records Office prior to the beginning of registration for their last semester of classes. Petition forms are available in the Admissions and Records Office.
2. Satisfy the minimum credit hour residence requirement.
3. Fulfill all financial obligations to the College.
4. Earn a cumulative grade point average of 2.0 or better for all courses which are applicable toward the degree or certificate.
5. There may be occasions when a student meets the criteria to graduate but has not completed a petition to graduate. Carl Sandburg College reserves the right to grant certificates or degrees to these students as qualifications are verified.
6. Results of the petition to graduate will be sent to current students MySandburg email only. If you are not a current student, and have submitted an application, results will be mailed to address on graduation application. If you have questions, please contact Angela Snow at 309-341-5233 or asnow@sandburg.edu

**Residency Requirement for Graduation**

Associate Degree candidates must earn fifteen (15) of the required semester hours in residence at the College. Certificate candidates must earn one-third (1/3) of the required semester hours in residence at the College. Residency is defined as enrollment and completion of courses taught by Carl Sandburg College. Credit earned by other than coursework (i.e., examination, advanced placement, etc.) may not be counted as part of the residency requirement for either degrees or certificates.
Graduation Honors

Honors
Designation for graduates whose cumulative grade point average is within the 3.50-3.69 range.

High Honors
Designation for graduates whose cumulative grade point average is within the 3.70-3.89 range.

Highest Honors
Designation for graduates whose cumulative grade point average is within the 3.90-4.00 range.

Certification
Candidates for certification in specific fields (i.e., nursing, dental hygiene, etc.) are responsible for fulfilling any special accreditation or certification requirements of the State of Illinois.

Carl Sandburg College Honors Program
The Carl Sandburg College Honors Program is for exceptional students who want to excel in college. Honors courses are intellectually challenging and involve considerable interaction among students and instructors. The Honors Program requires that students participate in an Honors Learning Community and complete an Honors Option.

Opportunities through Honors: friendly learning environment, challenging courses, independent study, honors scholarships, awards, and recognition on college transcripts.

There are many ways to be eligible to apply for the Honors Program. You can apply if you have one of the following: a cumulative high school GPA of 3.5 or higher; graduated in the top 10% of your high school class; had a composite score of 25 or above on the ACT; received a combined score of 1000 on the SAT; completed 12 college transfer credits with a minimum 3.25 GPA; completed 12 Carl Sandburg College transfer credits with a minimum 3.25 GPA; or are recommended by an instructor or counselor.

If you meet one of more of these requirements, you should contact the Honors Program Coordinator and pick up an application. The application process is simple and you will be notified within two weeks if you are accepted into the Honors Program.

What is an Honors Learning Community? An Honors Learning Community combines two different courses in two different disciplines. The courses are team taught by two instructors. The faculty cooperate together to integrate content and coordinate syllabi, strategies, and assignments. Outstanding faculty teach the classes. Honors courses are designed to help students learn and apply diverse concepts while stressing collaborative activity and creative and critical thinking.

Upon successful completion, the Honors Program offers an Honors Certification. The award will be noted on your transcript, and you will be recognized at Spring Commencement.

The requirements for the Honors Certificate are as follows: you must complete a minimum of 6 Honors Credits from Honors Learning Community Linked Classes and complete a non-credit Honors project; and you must maintain a GPA of 3.0 in your Honors classes.

For more information, comments or questions about the Carl Sandburg College Honors Program, please contact the Honors Program Coordinator at Carl Sandburg College, 309.341.5219.
STUDENT SERVICES

General Services

Academic Advising
Academic advising is an interactive process involving the student and his/her academic advisor. During the first term, each student is assigned to an academic advisor that specializes in the program the student is pursuing. The academic advisor serves as a valuable resource to the student in the areas of program requirements, graduation requirements and transfer coursework as well as giving guidance when a student may be experiencing difficulty in a course. It is required that the student meets with their advisor prior to registration beginning to review their degree plan and make sure the student is on track with their academic goals. In person, phone or Skype appointments are available.

Veterans' Advising
The Veterans' advisor works with veterans and members of the Reserve receiving educational benefits. This counselor provides academic and personal counseling to student veterans, regardless of expected benefits.

Personal Counseling
Short-term counseling services are provided for students facing personal or family problems. Counselors serve as a resource for all students by providing a caring, supportive environment in which students can examine, explore and make decisions about career, personal, and academic matters. Students also are assisted in goal clarification, achieving academic success and resolving personal dilemmas.

Career Counseling
Student Services counselors offer an assortment of individual or group services to assist with the process of making a career decision that is insightful and well informed. A variety of personal inventory and occupational assessments are available through the Student Services Office to assist students in making career decisions. Students can make an appointment with a counselor to take the assessments and then for the follow-up and interpretation of the results. Career Counseling services are available to all residents of the Carl Sandburg College district at no charge and fall into the categories of self-awareness resources and occupational resources.

Career Development
The Career Development Office assists students and alumni on all Sandburg campuses with career preparation needs. The following resources are available free of charge:

- Employability Skills Academy: A sixteen hour soft skills Academy committed to enhancing student success and provide learning experiences that may effectively improve the success rate in gaining and retaining employment. Upon successful completion of the Academy, graduates will receive a certificate of completion, one vocational skills credit and a respected digital badge.
- Career Expo: This annual, free event is held at the Main Campus in Galesburg each spring. This is an excellent way to meet potential employers, learn about their organizational needs, see who is hiring and explore a new career path.
- Career Opportunities: Full-time, part-time, summer and temporary vacancies are posted on the Career Development bulletin boards in the B Building hallway and upper C hallway and the Carl Sandburg Library.


General Career Assistance

- Writing - Learn how to make a lasting and positive impression on a prospective employer in a short amount of time by receiving assistance from a certified resume writer. Whether you are in the beginning stages or in need of a final proof, visit the office of career development for a consultation.
- Mock Interviews - Receive help in learning how to answer difficult questions, develop interview strategies, improve your communication skills and reduce your stress before an actual job interview.
- Etiquette Consultations - Discover how to impress a prospective employer during a dinner interview or learn specifics on proper business etiquette. Master the technique of creating a positive image by speaking with a certified etiquette consultant.

The Career Development Office is located in Room D207 on the Main Campus in Galesburg. For more information, contact the coordinator of career development at 309.341.5246.

Career Cruising

Career Cruising is an interactive career resource designed for students of all ages. Career Cruising was designed with one goal in mind: to help students plan their futures. With Career Cruising’s exceptional assessment tools, detailed occupational profiles, and comprehensive post-secondary education information, students can move seamlessly through the career exploration and planning process.

The program features interest assessment, skills match, occupational profiles, college and university searches, and career portfolio tools.

Carl Sandburg College students can link to Career Cruising from their mySandburg portal. Under the “My Bookmarks” tab, click on “Career Cruising”. Students can also access the program by going directly to www.careercruising.com (http://www.careercruising.com) (user name: CSC/password:careers). If you have any questions about the program, please see your counselor or advisor.

Library

Sandburg Library supplies a wide variety of traditional and innovative materials and services necessary to support our patrons’ educational and recreational needs. The library subscribes to research databases accessible online both on and off campus with a valid Sandburg login. In addition to over 30,000 volumes of books, DVDs, and print periodicals, the library also has an extensive inter-library loan program through which materials may be borrowed from other libraries. The libraries at both campuses provide study spaces and lab computers; the Main Campus MakerSpace provides students with equipment, supplies, and space for hands-on learning and creativity. The library staff provides information literacy instruction to teach students about research strategies and resources. One-on-one research assistance is also available both in-person and electronically. Contact library@sandburg.edu for research assistance. For a comprehensive list of services and materials available, visit http://www.sandburg.edu/Academics/Library/Library-Services.html.

Sandburg Library is open to the public; community members may check materials out of the library after presenting appropriate identification. The Main Campus Library is open from 7:45 AM to 6:00 PM Monday through Thursday and from 7:45 AM to 4:45 PM on Friday. The Carthage Campus
providing educational, cultural, and social services to participants. The program serves Knox County students who have the skills and motivations necessary to successfully pursue and complete a college education. The program is designed to assist college-bound, high school students develop the skills needed to successfully pursue a college education. The TRIO Upward Bound program is a college readiness program that provides academic, financial, and social support to students. The program is funded by a grant from the U.S. Department of Education.

To apply for this program, stop by the TRIO office in E136 or call 309.341.5362 for more information. This program is available on the Galesburg campus only. The TRIO SSS program is funded 100% by a grant from the U.S. Department of Education. In 2018-2019, the funded amount was $242,136.

TRIO Student Support Services

The TRIO SSS program offers support services to students who are planning to transfer to a four-year university and who are either first-generation college students or who are eligible according to federal income guidelines. The goal of the program is to help participants stay in school, graduate from Sandburg, and transfer to a four-year college or university. Services include: academic advising, transfer advising, orientation to college, intensive mentoring and support during the first year of college, financial aid and scholarship advising, planning for four-year college expenses, assistance with study skills, career research and planning, and support with other college-related or personal issues.

To apply for this program, stop by the TRIO office in E136 or call 309.341.5362 for more information. This program is available on the Galesburg campus only. The TRIO SSS program is funded 100% by a grant from the U.S. Department of Education. In 2018-2019, the funded amount was $242,136.

TRIO Upward Bound

The TRIO Upward Bound program is a college readiness program designed to assist college-bound, high school students develop the skills and motivations necessary to successfully pursue and complete a college education. The program serves Knox County students who attend Abingdon-Avon, Galesburg, Knoxville, and ROWVA high schools, providing educational, cultural, and social services to participants throughout the year, including academic skills coaching, information and training about the post-secondary admission process and study habit best practices, and major and career exploration, among other services. During the summer, students participate in an in-depth summer enrichment program, with instruction in math, lab sciences, foreign language, and composition and literature. Students also have access to a variety of resources and activities, including laptops, calculators, stipends, and social and cultural activates and trips geared toward increasing exposure to educational and career opportunities.

TRIO Upward Bound is a federal grant, initially awarded to Carl Sandburg College in the Fall of 1999. The grant is 100% funded in the amount of $288,912 annually through the U.S. Department of Education. For more information about the program, an application, and/or selection criteria call 309.341.5268. Visit us online at www.sandburg.edu/TRIO-UB.

TRIO UPWARD BOUND Math-Science

TRIO Upward Bound Math-Science is a federally funded program designed to help first-generation, income-eligible high school students excel in secondary and post-secondary education. Carl Sandburg College was awarded the TRIO Upward Bound Math-Science grant in the Fall of 2017. Upward Bound Math-Science serves students who attend Abingdon-Avon, Galesburg, Knoxville, Monmouth-Roseville, and ROWVA high schools. The TRIO UBMS program is funded 100% by a grant from the U.S. Department of Education. In 2018-2019, the funded amount was $275,155.

Upward Bound Math-Science provides educational, cultural, and social services to program participants throughout the year. Students are provided information and advising in various academic skills, as well as in the areas of post-secondary education and career exploration. During the summer, students are provided instruction in math, lab science, foreign language, and composition and literature. Students have available resources such as laptops and calculators, and have the opportunity to participate in various program trips and activities. Participants also have the opportunity to work with a faculty mentor and contribute to a science fair each May. For more information on the program, application, and/or selection process call 309.341.5228.

Academic Support Services

Located in the Crist Center, B64, on the Galesburg campus, Academic Support Services offers tutoring services for all students and support services for students with disabilities.

Disability Support Services

Carl Sandburg College makes it a priority to be an environment in which students of all backgrounds can come to pursue their academic and professional goals. As such, we strive to be a campus that is disability-friendly, both in terms of physical accessibility of our facilities and equal opportunity of access to learning materials and classroom experience. We seek to enable students with any history of disability, from physical disabilities to intellectual disabilities, anxiety, and attention deficits.

In compliance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Disability Support at Carl Sandburg College seeks to make the classroom equally accessible to students with disabilities by providing students with tools and accommodations intended to remove barriers imposed by their unique disabilities.

Current or prospective students or visitors to campus who have questions about disability access to campus resources or who would like to request accommodations for a disability while on campus should contact the Welcome Center.
contact the Coordinator of Academic Support Services at 309-341-5262, or jrunge@sandburg.edu.

Carl Sandburg College does not discriminate on the basis of the student's sex, color, race, religion, creed, ancestry, national origin, physical or mental disability, sexual orientation, sexual identity or other protected group status.

Tutoring Services
The Carl Sandburg College Tutoring Program is a fantastic, free resource for all Carl Sandburg College students. Through tutoring, our goal is to provide friendly, accessible academic assistance in all subject areas. Students on the Galesburg campus interested in any of the resources listed below should visit the Tutoring Center in room B72 for more information; students at any Carl Sandburg College location or who are taking classes online should contact the Coordinator of Academic Support Services for more information at 309.341.5262.

Face-to-Face Tutoring
The Tutoring Center, located in B72, is the place to go for help with all of your core classes, from math and science to writing, Spanish, and general study skills. Tutoring is available primarily on a walk-in basis, though students can call ahead to schedule an appointment. Additionally, students may attend study sessions for CTE (Career and Technical Education) courses, arranged on an as-needed basis, by asking their instructor or contacting the Coordinator of Academic Support Services. Students in Carthage should contact the Student Services specialist on their campus for information about tutoring availability. Online students or those who attend the Carthage campus can schedule tutoring sessions via Skype by calling 309.341.5262.

Tutoring sessions are casual interactions that are student-initiated, student-centered, and student-driven. Students get the most out of tutoring services when they come well before an assignment is due and prepared to work. Students often come for clarification, extra practice, brainstorming and planning, or guidance on their homework. Tutoring is not a homework correction service; rather it should be seen as an educational opportunity, additional instructions that enables students to work on their own with more confidence.

Online Tutoring
Students have access to tutoring any day, any time with Brainfuse. If you have internet access and a Carl Sandburg College student email account, you can take advantage of this resource.

Online tutoring is free, one-on-one, real-time tutoring via your computer, tablet, or smart phone. Brainfuse records your documents and tutoring sessions, so they are easily accessible as study notes later, or sent to your instructor. Best of all, it's a tutoring service that conforms to your schedule—even if that means you're getting tutored at 3AM! Brainfuse also offers skillbuilding exercises, video tutorials, practice tests, and much more.

Head over to your mySandburg page to get started. Click on the Brainfuse link to be automatically logged in from your mySandburg page or if your instructor has enabled it, your Moodle course page.

Student Life
Student learning expands well past the walls of the classroom! The Offices of Student Life offers meaningful co-curricular experiences that complement the academic curriculum and in turn, provide an active and engaging campus environment. Take advantage of all the opportunities at Sandburg to enjoy college and make your experience great! Visit our website to learn more about Student Life at Carl Sandburg College http://sandburg.edu/Campus-Life/index.html.

Athletics
Carl Sandburg College is a member of the National Junior College Athletic Association (NJCAA) and the Arrowhead Athletic Conference. Student athletes compete in the sports of men’s baseball, basketball, cross country, golf, and soccer; and women's basketball, cross country, golf, softball, and volleyball.

Each home game is a chance to come out and cheer on your Sandburg Chargers. All students receive free admission to home sporting events. There is a student section to cheer on the Chargers to victory, along with frequent interactive activities. Get the latest Chargers news and information at http://sandburg.edu/Athletics/index.html, facebook.com/sandburgathletics (http://www.facebook.com/sandburgathletics) or twitter.com/sandburgNJCAA (http://twitter.com/sandburgnjcaa).

Phi Theta Kappa
The Chi Kappa chapter of Phi Theta Kappa, the international honor society for two-year colleges, is committed to recognizing outstanding scholarship and to assisting its members in obtaining academic scholarships and job opportunities, while fostering leadership and personal achievement. The organization offers several national scholarships, as well as opportunities to be nominated for additional honors, such as membership on the society's Academic All-American Team. To become a member, students must be currently enrolled and must have a grade point average of at least 3.5 after a minimum of 12 hours of course work leading to an associate's degree. Contact 309.341.5219.

Student Government Association
The Student Government Association (SGA) is the officially recognized student governance body for Carl Sandburg College. SGA is composed of five executive officers and up to 15 student representatives who serve as the liaison between the student body and the College, govern student organizations, and assist with campus events. Elections are held in the fall semester. To learn how you can get involved, contact the SGA Advisor at 309.341.5332 or sga@sandburg.edu.

Benefits of Becoming a Student Leader:
• Gain professional and personal skills (social, organizational, leadership, etc.)
• Build your resume with experience
• Leave your mark on Sandburg
• Network with professionals and peers
• Attend conferences and workshops
• Enrich your college experience!

Student Life
The Office of Student Life provides out-of-classroom experiences that compliment your academic program. Student Life oversees student events, organizations, and the Student Government Association. Don’t see what you’re looking for? Contact the Student Life Coordinator today to see about starting your own movement. Call 309.341.5332 or visit our website at http://sandburg.edu/Campus-Life/index.html. (http://sandburg.edu/life/student-life)
**Student Organizations**

Student organizations are a great way to get involved on campus, meet new people, give back to our community, and enhance your college experience! Student organizations may focus on academics, community services, entertainment, and campus improvement. For a complete listing of student organizations please visit our website at [http://sandburg.edu/Campus-Life/index.html](http://sandburg.edu/Campus-Life/index.html).

**Student Publications**

The College provides students with opportunities for writing, editing, and print production through the literary magazine, *Phizzogs*. Interested students may contact the Humanities & Fine Arts Department for more information about joining or contributing towards the publication.

**Theater, Music, and Art**

Carl Sandburg College’s fine arts facility consists of well-equipped studios, rehearsal and recital rooms, and an intimate 180-seat theater.

Sandburg Theater produces main stage productions, student-led productions and ancillary performance activities like Talent Shows, Improv Theater and student acted and directed scenes. Drama Club provides leadership opportunities, social and educational experiences such as viewing area college and professional productions, service learning, and performing for area schools. Participation in all theater activities is open to all Sandburg students. Actors are chosen through auditions and Drama Club officers are elected by its student members. Classes like Acting and Theater History provide students opportunities to showcase their skills in public performance or presentation. Whether you have an interest in working on or off stage, there is a place for you at Sandburg Theater.

The music department offers many opportunities for students from all majors. Large and small choirs present multiple concerts each semester for both campus and community, and the Sandburg Jazz Combo performs regularly each semester. Music groups regularly attend area concerts, shows, and often take longer performance and cultural trips. Participation in music ensembles is open to all students, staff, faculty, and community members.

The fine arts department at Carl Sandburg College offers classes that are accessible for all levels of experience. Events like the Art Institute of Chicago field trip and the student art show are open to any interested student. Art majors are encouraged to become involved in gallery or collection conservation work through the department. Every art student is given opportunities to exhibit work in a variety of venues, on- and off-campus, including our new Lonnie Eugene Stewart Art Gallery. Sales of student art work are always encouraged. Additionally, the department sponsors exhibits of the work of professional artists from across the region; often these artists will give gallery talks or studio demonstrations, providing additional resources for students.

**Bookstore**

The Carl Sandburg College Bookstore is located in the Crist Center in building B. The Sandburg Bookstore is a friendly place where the student may purchase textbooks for classes. Textbooks may also be purchased online or reserved at [www.bkstr.com/carlssandburgcollege/home](http://www.bkstr.com/carlssandburgcollege/home). Textbooks are available for sale online and in the store three weeks prior to the start of classes. The bookstore offers a textbook rental program in which selected titles are rented for the semester. The bookstore also sells e-books as selected by the instructors. The bookstore's normal hours of operation are Monday through Thursday, 8:30 a.m. to 4:30 p.m., and Friday, 8:30 a.m. to 3:30 p.m. The bookstore offers extended hours during each semester rush and buyback; these hours will be posted throughout the campus and on our Web site. The bookstore will be closed as the College dictates due to severe weather conditions, etc., and any College-observed holidays.

In addition to standard school supplies, the bookstore also carries required supplies for art and photography courses. For the student in the medical field, the bookstore offers a selection of quality clothing, accessories, and supplies at an affordable student price. The bookstore also stocks a variety of non-textbook merchandise for other classes, such as jump drives, headphones and goggles, and a variety of imprinted Sandburg clothing and gifts.

Students who have applied for and have been awarded financial aid and who have Pell, SEOG, IIA, and some scholarships may be able to charge their purchases in the bookstore, using the balance of these funds after all tuition and fees are charged off the account. Book charge dates are posted at the bookstore and on our Web site.

**Full Refund Policy**

Textbook returns will follow in accordance with Carl Sandburg College refund policies for tuition refunds. The textbook must be returned with a receipt in the same condition as purchased for a full refund. Textbooks that are shrink-wrapped must be returned with the shrink-wrap intact for a full refund. Textbooks that have been unwrapped will be refunded at a used textbook price. If the textbook is defective, it is the student’s responsibility to return it immediately to the bookstore for an exchange.

Computer software and electronics may NOT be returned or exchanged if the package is opened.

Please note: It is the student’s responsibility to provide a receipt. All returns and exchanges must be accompanied by a receipt regardless of the form of payment (cash, check, credit card, or financial aid).

**Buyback Policy**

At the end of each semester, during Finals Week, the bookstore will hold a buyback session in which textbooks in good saleable condition, i.e., no water-damaged books, books must have covers and pages intact, and any CDs or diskettes must accompany the textbook if they were purchased with it. The exact dates and times of the buyback will be posted a week prior to finals.

**Special Orders**

The bookstore offers special ordering for any textbooks, trade books, and other items that may not be in stock. Please ask the staff about special ordering an item that is not on the shelf.

**Procedure for Addressing Student Concerns**

Should the student have a concern or a complaint — an issue believed to have an adverse effect upon the student, someone else, or a group of students — the student may work to address that problem by first bringing the issue to the attention of the person(s) against whom the complaint is directed. Should resolution not be reached at that level, the issue must be presented, within ten school days of the issue in question, to the immediate supervisor of the person against whom the complaint is directed or to a Student Services Counselor who will, in a timely fashion, direct the student to the appropriate supervisor and then to the appropriate dean. If no resolution is reached at the dean’s level, the student may appeal to the proper vice president.
decisions, notification of decisions and reasons for decisions shall be in writing. This procedure shall not apply to complaints filed on the basis of discrimination and/or sexual harassment.

Policy on Anti-Discrimination/EEO
Carl Sandburg College, an equal opportunity/affirmative action employer and educator, complies with all applicable federal, state and/or local laws prohibiting discrimination. It is the policy of the College that no person shall be discriminated against in employment, educational programs and activities, or in admissions on the basis of race, color, religious affiliation, gender (sex), sexual orientation, gender identity or expression, national orientation, ancestry, genetic information, disability, age, arrest record status, marital or family status, citizenship status (with regard to employment), military status, unfavorable military discharge, sexual harassment, order of protection status and status in any group protected by applicable federal, state and/or local laws.

Student Code of Conduct
Please view the Student Code of Conduct (Procedure on Disciplinary Due Process 3.16.1.1) by following the link: Student Code of Conduct. (http://sandburg.edu/Services/Public-Safety)

Student Rights and Responsibilities
Carl Sandburg College recognizes that students are citizens as well as members of an academic community. As a citizen, each student has the freedom of speech, assembly, association, the press, and the rights of petition and due process which are guaranteed by the state and federal constitutions. As a member of an academic community, students have the right and responsibility for participating in the formulation and review of all-college regulations and policies directly affecting them. Upon enrolling in the College, each student assumes an obligation to conduct himself/herself in a manner that is compatible with the College’s function as an educational institution. If this obligation is neglected or ignored by the student, the College must, in the interest of fulfilling its function and meeting its total obligations, institute appropriate disciplinary action as outlined in the Carl Sandburg College Policy, Regulation and Procedure Manual.

Student Harassment and Sexual Harassment
It is the policy of the College to maintain a learning environment that is free from harassment based on a student’s sex, color, race, religion, creed, ancestry, national origin, physical or mental disability, sexual orientation, or other protected group status. The College prohibits any and all forms of the above-mentioned harassment.

It shall be a violation of the College’s policy for any “College Representative,” “Collegian Personnel,” or "Third Parties" as defined by this policy to harass a student as defined herein or to tolerate harassment or sexual harassment because of a student’s sex, color, race, religion, creed, ancestry, national origin, physical or mental disability, sexual orientation, or other protected group status.

Health Services
Students who become ill or need emergency medical treatment may seek help at St. Mary Medical Center and Cottage Hospital, both in Galesburg. The College assumes no responsibility for medical treatment of students and has no facilities or professional staff for emergency treatment of ill students.

Policy on Tobacco-Free Campus
As of July 1, 2015, smoking is prohibited on all campus property at Carl Sandburg College, both indoors and outdoors, in College-owned vehicles and in privately-owned vehicles parked on campus property. The advertising, sale or free sampling of tobacco products is also prohibited on campus property. Littering the remains of tobacco products or any other related waste product on campus property is further prohibited. (Public Act No. 098-0985). For a complete list of prohibited items, please refer to the Policy on Tobacco-Free campus (http://www.sandburg.edu/About/Board-of-Trustees/Assets/Policies/policy-2.16.pdf).

Crime Awareness and Public Safety
Preface
In response to the Crime Awareness and Campus Security Act of 1990 requiring all post-secondary institutions to prepare an annual report detailing crime prevention policies and campus crime statistics, Carl Sandburg College has issued its Crime Awareness and Campus Security Report showing data for calendar years 2015, 2016, and 2017.

This annual report features Carl Sandburg College policies regarding crime prevention issues, services performed by the college, anti-crime information available through the college, crime statistics and prescribed standards of conduct as set forth by the policies of the Board of Trustees.

Public Safety
Carl Sandburg College provides for safety and security needs of staff, students and visitors through the public safety officers, who are on site 24 hours per day, 365 days per year.

Any person who witnesses a crime or becomes a victim of a crime should report it as soon as possible to Public Safety. For emergencies, Public Safety can be reached from any on-campus college phone simply by calling the campus dispatch (Dial - 5499). For non-emergencies, Public Safety may be reached 24 hours a day by dialing 0 from any campus phone or 309.341.5304. Questions about safety, security or law enforcement issues should be referred to the director of public safety, located in D-201A, or call 309.341.5325.

The director of public safety receives all incident/accident reports filed by any individual of the college community. When multiple incidents occur during the same time frame, reports and subsequent action by public safety officers are handled in order of priority: 1) personal safety; 2) property crime; 3) services.

Clery Crime Report
Carl Sandburg College provides crime statistics involving murder, rape, robbery, aggravated assault, burglary, motor vehicle theft, arrests for liquor, stalking, domestic violence, dating violence, and drug and weapons violations in accordance with the Crime Awareness and Campus Security of 1990. All incidents of a criminal nature occurring at off-campus facilities are reported to that facility’s local law enforcement agency.


NOTE: No Residence Halls on or off campus.
Any questions about the Crime Statistics or safety issues on Carl Sandburg College can be directed to the director of public safety at 309.341.5325.

Emergency Phone System
Carl Sandburg College’s Emergency Telephone System consists of emergency telephones located in the College buildings and across campus. All emergency telephones on campus are connected to the College dispatch center. The dispatch center is staffed 24 hours a day, Monday through Sunday.

If the caller is unable to respond verbally, the boxes are a one-button system enhanced by location ID. All emergency telephones will ring directly to the Campus Dispatch Center.

This system is for emergencies only when you need Public Safety assistance. This would include medical emergencies, accidents, reporting a fire, or request for escorting of students. This system is not for general information on campus activities or directions. Every classroom has an in-house telephone that can be used to reach the Galesburg Police Department by dialing 911; any situation that requires a call to the Galesburg Police Department should be reported to Carl Sandburg College’s Public Safety at 5499.

Any abuse or violation of the Emergency Telephone System will lead to disciplinary action, arrest, or prosecution.

Facility Access
The facilities of this college are provided by the State of Illinois and the Carl Sandburg College District to provide a service to this college community. The service includes not only the instructional program, but a public service beyond that normally called instruction. The facilities of the college may be used by other groups and organizations for such purposes that will extend and enhance the general welfare of the total community.

Carl Sandburg College’s Galesburg campus is open from 8:00 a.m. to 9:00 p.m. Monday through Thursday and 8:00 a.m. to 6:00 p.m. Friday, excluding declared holidays. During closed periods, all exterior doors are locked to prohibit unauthorized entry. Faculty and staff may enter after hours by making prior arrangements with their supervisor and Public Safety. Student access to facilities after hours is prohibited unless they have the expressed permission of a college employee and Public Safety has been notified.

Public Safety utilizes motor and foot patrol as well as portable radio/telephone communications to monitor the premises both inside and out. Public Safety also utilizes cameras across campus, and they are monitored 24/7, 365 days a year.

Parking Regulations
The College has multiple free parking lots, each with designated handicapped spaces. Parking is prohibited on sides of entry roads, in fire lanes, or on the lawn areas. A ticket will be issued for taking up two parking spaces or for parking over the lines resulting in two parking spaces being taken. Unauthorized use of designated handicapped parking spaces, will result in a ticket with a monetary fine in accordance with Illinois Vehicle Code 625-ILCS-5.

The Risk Management Committee of the College has been charged with the responsibility of serving as the Appeals Board for persons issued a parking violation. This committee meets each month and its membership is comprised of students, faculty and staff. Parking violation fines must be paid within ten (10) days to the Business Office. Appeals may be made only AFTER the fine has been paid. Appeal forms may be picked up in the Public Safety Office (D201).

Enforcement Policies
The Board of Trustees of Community College District #518 has employed Public Safety personnel which report to the Director of Public Safety. Their primary purpose is to monitor and maintain the security of college assets and personnel by observing, reporting and then acting within the framework of established procedures.

In this capacity, public safety officers facilitate conservation of the peace by working harmoniously with all local law enforcement agencies. In the event of classroom/student and/or other college-business related emergency, college personnel are instructed to remove themselves from dangerous situations. If the immediacy of the situation requires, college employees will call the proper emergency facility by dialing 911 from the nearest public phone or 911 from the nearest college phone.

Public safety officers do not possess any of the powers of sheriffs in counties or policemen in cities except the Director of Public Safety and the Coordinator of Public Safety. Carl Sandburg College resides within the city limits of the City of Galesburg and, therefore, Public Safety will partner with the Galesburg Police Department for all major crimes that occur on Sandburg property. Public safety officers are not authorized to carry or use weapons in the performance of their duties except the Director of Public Safety and the Coordinator of Public Safety.

Information Programs
Carl Sandburg College endeavors to reduce the likelihood and opportunity for unsafe activity on campus through a proactive risk management program involving all campus constituencies.

The College maintains a substance abuse awareness program to inform students and employees about the dangers of substance/alcohol abuse, college policy of maintaining a substance/alcohol-free environment, available abuse counseling and rehabilitation assistance programs, and the penalties that may be imposed upon students and employees for violations occurring in the college. The College also maintains a sexual assault prevention and awareness program to inform students and employees on resources available to victims, bystander awareness and reporting, and how a victim can file a report to our Public Safety department and/or local law enforcement.

Students and employees are encouraged to be responsible for their own security.
CORPORATE AND LEISURE COLLEGE

Corporate and Leisure College
The Corporate and Leisure College of Carl Sandburg College provides workshops, classes, educational day trips, and events to inspire learning that enriches lives both professionally and personally. Programs are designed to attract everyone with a desire to learn, regardless of previous academic experience or career path. The following services promote lifelong learning from children to adults. Current course schedules can be viewed online at http://sandburg.edu/Academics/Corporate-Leisure-College/index.html

Corporate College
The Carl Sandburg College Corporate College serves as the primary contact for all inquiries from the business and industrial community. The Corporate College staff will assist businesses of any size, analyze their needs, and will work to arrange appropriate college services, i.e., credit classes, non-credit classes, seminars, workshops, on-site training programs or customized training.

The Corporate College is located at the Center for Manufacturing Excellence (CME) on the main campus. Training classes may be held at the college or at the company’s location depending on their needs. Corporate College business classes are also available through the Carthage campus, respectively.

Leisure College
The Leisure College classes are held at various locations throughout the district and include non-credit general interest classes for personal growth and enjoyment. Classes in the following areas may be offered: history, art, computers, gardening, crafts, cooking, fitness and more. Our educational day trips provide individuals with a chance to explore interesting topics and visit unique places.

Community education classes and day trips are advertised through the Corporate and Leisure schedule. Detailed information is available online at http://sandburg.edu/Academics/Corporate-Leisure-College/index.html. Classes are designed for various age and interest groups. Suggestions and ideas are always encouraged and should be given to the Leisure College staff.

Kids on Campus
A summer program for area youth is offered through the Carthage campus. Topics are designed to be interesting, challenging, and age-appropriate for elementary and middle school youth. Summer program flyers are distributed to area schools in April or May each year. Additional information for youth programs is listed online at http://sandburg.edu/Academics/Corporate-Leisure-College/index.html

For More Information contact
Director of Corporate and Leisure College
Galesburg Main Campus
Center for Manufacturing Excellence
2051 Tom L. Wilson Blvd.
Galesburg, IL 61401
309.341.5330
THE BRANCH CAMPUS -
CARTHAGE, ILLINOIS

The Branch Campus is located on the north edge of Carthage, just off Highway 94. This location serves the communities, businesses, organizations, and school districts of Hancock county and portions of Fulton, Henderson, and McDonough counties in western Illinois. The full-service campus provides baccalaureate, career, community education, and general study programs. Some popular career and technical classes offered at the Branch Campus include criminal justice, accounting, business, nurse aide, phlebotomy, and administrative office programs.

Students receive individualized attention for academic advising, career counseling, and financial aid planning in a relaxed, friendly educational atmosphere. Tutoring and support services are also available. Additional offerings include seminars, workshops, and customized training for businesses and industry.

Ellen Henderson-Gasser
305 Sandburg Dr.
Carthage, Illinois 62321
Phone: 217.357.3129
Fax: 217.357.3512
TTY line: 309.341.5400
Directions to the Branch Campus (https://www.google.com/maps/place/Carl+Sandburg+College+-+Branch+Campus/@40.4260337,-91.1415257,17z/data=
%213m1%215s0x87e0cdd4bde89a1d:0xfffa474574b45d868%214m13%211m7%213m6%211s0x87e0cdd4b10e8897:0x6b14e32b0f67c3e4%212s305+Sandburg+Dr,+Carthage,+IL
+62321%213b1%218m2%213d40.4260337%214d-91.139337%213m4%211s0x0:0x12bc785506949865%218m2%213d40.4268849%214d-91.1392998?hl=en&authuser=0)
DEGREES, PROGRAMS, AND CERTIFICATES

University Studies

A wide variety of programs leading to degrees and certificates is offered by the College to serve a variety of student needs. Students needing assistance in selecting an appropriate program for their career goals are advised to meet with a counselor.

Associate in Arts, Associate in Science, Associate in Science (Agriculture), Associate in Fine Arts (Emphasis in Art) (Transfer Degrees)

The Associate in Arts (AA), Associate in Science (AS), Associate in Science (Agriculture), or Associate in Fine Arts (AFA) degree is for those students planning to transfer to a senior college or university to earn a Baccalaureate degree.

Area of Concentration Requirements

In support of our Associate in Arts and Associate in Science degrees, Sandburg offers areas of concentration to guide the student in completing courses in a selected discipline. The student should consistently communicate with the college or university he/she intends to transfer to after degree completion at Sandburg to ensure all the requirements are met for the selected major. We do not guarantee that our areas of concentration meet any specific major requirements.

To graduate with an Associate’s degree and an area of concentration, the student must successfully complete the required courses in the degree plan for the specific area of concentration. If the student meets all degree and graduation requirements, the Associate’s degree with the selected area of concentration will be listed on the student’s transcript.

Transfer Information

Associate and baccalaureate degree-granting institutions are equal partners in providing the first two years of baccalaureate degree programs in Illinois. While each institution is ultimately responsible for the quality of the programs it provides, both associate and baccalaureate degree-granting institutions are expected to work together to assure that their lower-division baccalaureate programs are comparable in scope, quality, and intellectual rigor.

Any student admitted in transfer to an Illinois baccalaureate degree-granting institution should be granted standing comparable to current students who have completed the same number of baccalaureate-level credit hours and should be able to progress toward baccalaureate degree completion at a rate comparable to that of students who entered the baccalaureate institution as first-time freshmen. To assure students of comparable treatment, it is expected that:

1. Students admitted in transfer who have earned an Associate in Arts or an Associate in Science degree from a regionally accredited Illinois community or junior college whose general education requirement for the degree incorporates the Illinois General Education Core Curriculum will have met the receiving institution’s all-campus, lower-division general education requirement for the baccalaureate degree (or a second associate degree). A receiving institution may, however, require admitted transfer students to complete an institution-wide and/or mission-related graduation requirement that is beyond the scope of the Illinois General Education Core Curriculum.

2. Students admitted in transfer who have satisfactorily completed the Illinois General Education Core Curriculum at any regionally accredited Illinois college or university prior to transfer should be granted credit in lieu of the receiving institution’s all-campus, lower-division general education requirement for an associate or baccalaureate degree. A receiving institution may, however, require admitted transfer students to complete an institution-wide and/or mission-related graduation requirement that is beyond the scope of the Illinois General Education Core Curriculum.

3. Students admitted in transfer who have satisfactorily completed courses within the Illinois General Education Core Curriculum at a regionally accredited Illinois college or university should be granted credit towards fulfilling the receiving institution’s comparable all-campus, lower-division general education requirement.

4. Students admitted in transfer who have met program entry requirements and have satisfactorily completed courses described in an Illinois Articulation Initiative Baccalaureate Major Curriculum Recommendation at a regionally accredited Illinois college or university should be granted credit towards fulfilling the receiving institution’s comparable lower-division requirements for that specific major. Where admission is competitive, completion of a Baccalaureate Major Recommendation does not guarantee admission.

AAS and Certificate Programs

Career, Technical, & Health Education (CTHE) programs are available as a Certificate, which may be completed in as little as nine months, or as an Associate in Applied Science degree, which may be completed in as little as two years. This specialized approach to education results in graduates who enter the job market with highly marketable skills and backgrounds. The courses that you take in our CTHE programs were selected based upon recommendations from professionals working in specific CTHE fields.

Statement on General Education

The Higher Learning Commission believes that quality undergraduate higher education involves breadth as well as depth of study. According to the HLC commission statement, “General education is intended to impart common knowledge and intellectual concepts to students and to develop in them the skills and attitudes that an organization’s faculty believe every educated person should possess.” A general education curriculum provides an opportunity for students to acquire some breadth of knowledge, proficiency in skills that are deemed to be commonly shared by those receiving a college education, and allow students to gain exposure to and competence in pursuit of intellectual inquiry and the examination of personal, social, and civic values.

At Carl Sandburg College we are committed to the centrality of general education by including an appropriate component of general education coursework in all of the Associate in Applied Science degrees as well as many of the certificates. These courses are identified in the catalog description as a general education core or an elective.

NOTE:
Though some CTHE programs will transfer to specific four-year institutions, most will not. To find out the transferability of a specific CTHE program, talk with your advisor.

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AA DEGREE REQUIREMENTS

Associate in Arts Degree

I. General Education Requirements

A. Communications

ENG.101 Freshman Composition 1*
ENG.102 Freshman Composition 2**
SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts

Select one course from Fine Arts:

ART.111 Art Appreciation
ART.112 Art: Prehistoric to 1400
ART.113 Art: 1400 to Present Day
ENG.151 Introduction to Film Art
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.107 Music in the Theatre
THE.110 Theatre Arts Appreciation
THE.111 Theatre History

Select one course from Humanities:

ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHI 100 Logic
PHL.101 Introduction to Philosophy
PHL.102 Ethics

Select three additional hours from either Humanities or Fine Arts

C. Social Sciences

Select three courses from the following:

(Eight must select one or more courses from 3 subject areas)

ECO.101 Introduction to Economics
ECO.201 Principles of Macro Economics
ECO.202 Principles of Micro Economics
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.105 American History to 1877
HIS.106 American History From 1877
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
POS.122 American Government & Politics
POS.223 State & Local Government
POS.228 International Relations
POS.267 Comparative Government

D. Science/Mathematics

Select one course from Life Sciences:

BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology

Select one course from Physical Sciences:

CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
ESC.100 Introduction to Earth Science
PHY.130 The Physical Universe
PHY.151 General Physics 1

Math

Select one course from the following:

MAT.109 Concepts of Mathematics
MAT.131 Finite Mathematics
MAT.135 Calculus for Business Or Social Sciences
MAT.210 Statistics
MAT.240 Calculus With Analytic Geometry 1
MAT.241 Calculus With Analytic Geometry 2
MAT.242 Calculus With Analytic Geometry 3

SSC.120 Statistics for Social Science (One or the other, but not both.)

or MAT.110 General Education Statistics

II. Electives

21

III. Other Requirements

3

Human Relations Course — Select one course from the following:

ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AA ACCOUNTING CONCENTRATION

ASSOCIATE IN ARTS (ACCOUNTING CONCENTRATION) DEGREE

I. Accounting Requirements
Core courses needed for concentration 19
ACC.101 Principles of Financial Accounting
ACC.102 Principles of Managerial Accounting
ECO.202 Principles of Micro Economics
BUS.100 Introduction to Business
MAT.130 College Algebra
MAT.135 Calculus for Business Or Social Sciences

II. General Education Requirements 37
A. Communications 9
ENG.101 Freshman Composition 1 *
ENG.102 Freshman Composition 2 **
SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
ART.111 Art Appreciation
ART.112 Art: Prehistoric to 1400
ART.113 Art: 1400 to Present Day
ENG.151 Introduction to Film Art
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
THE.110 Theatre Arts Appreciation
THE.111 Theatre History

Select one course from Humanities:
PHL.102 Ethics (Recommended)
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHL.100 Logic
PHL.101 Introduction to Philosophy

Select three additional hours from either Humanities or Fine Arts

C. Social Sciences 9
ECO.201 Principles of Macro Economics
PSY.101 Introduction to Psychology
or SOC.101 Introduction to Sociology

Choose one course from the following:
GEO.100 Human Geography

II. Electives 21

III. Other Requirements 3

Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.205 Music and Society
PHL.102 Ethics
PHL.103 Biomedical Ethics
PSY.204 Social Psychology
SOC.101 Introduction to Sociology

D. Science/Mathematics 10
Science *** 7

Select one course from Life Sciences:
BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology
Select one course from Physical Sciences:
CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
ESC.100 Introduction to Earth Science
PHY.130 The Physical Universe
PHY.151 General Physics 1

Math 3
MAT.110 General Education Statistics
or MAT.210 Statistics
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

| Total Hours Required For Degree | 61 |
AA BUSINESS CONCENTRATION

ASSOCIATE IN ARTS (BUSINESS CONCENTRATION) DEGREE

I. Business Requirements
Core courses needed for concentration 19
- ACC.101 Principles of Financial Accounting
- ACC.102 Principles of Managerial Accounting
- ECO.202 Principles of Micro Economics
- BUS.100 Introduction to Business
- MAT.130 College Algebra
- MAT.135 Calculus for Business Or Social Sciences

II. General Education Requirements 37
A. Communications 9
- ENG.101 Freshman Composition 1
- ENG.102 Freshman Composition 2
- SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
- ART.111 Art Appreciation
- ART.112 Art: Prehistoric to 1400
- ART.113 Art: 1400 to Present Day
- ENG.151 Introduction to Film Art
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- THE.110 Theatre Arts Appreciation
- THE.111 Theatre History

Select one course from Humanities:
- PHL.102 Ethics (Recommended)
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.231 British Literature 1
- ENG.232 British Literature 2
- ENG.240 Women and Literature
- MUS.205 Music and Society
- PHL.100 Logic
- PHL.101 Introduction to Philosophy

Select three additional hours from either Humanities or Fine Arts

C. Social Sciences 9
- ECO.201 Principles of Macro Economics
- PSY.101 Introduction to Psychology
- or SOC.101 Introduction to Sociology

Choose one course from the following
- GEO.100 Human Geography
- GEO.110 World Regional Geography

D. Science/Mathematics 10
Science*** 7
- Select one course from Life Sciences:
  - BIO.101 General Biology
  - BIO.102 General Zoology
  - BIO.103 General Botany
  - BIO.120 Environmental Science
  - BIO.205 Human Biology
- Select one course from Physical Sciences:
  - CHM.100 Concepts of Chemistry
  - CHM.110 General Chemistry 1
  - ESC.100 Introduction to Earth Science
  - PHY.130 The Physical Universe
  - PHY.151 General Physics 1

Math 3
- MAT.110 General Education Statistics
  - or MAT.210 Statistics

II. Electives 21

III. Other Requirements 3
Human Relations Course — Select one course from the following:
- ART.111 Art Appreciation
- ART.113 Art: 1400 to Present Day
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.250 African American Literature
- GEO.100 Human Geography
- GEO.110 World Regional Geography
- HIS.125 Western Civilization 1
- HIS.126 Western Civilization 2
- HIS.285 History of Africa: 1500 to Present
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- MUS.205 Music and Society
- PHL.102 Ethics
- PHL.103 Biomedical Ethics
- PSY.204 Social Psychology
- SOC.101 Introduction to Sociology
- SOC.102 Contemporary Social Problems
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**Residency Requirement** — (Complete 15 semester hours at Sandburg)

**GPA Required for Graduation** — 2.0 on 4.0 scale

**Total Hours Required For Degree** | 61
AA ECONOMICS CONCENTRATION

ASSOCIATE IN ARTS (ECONOMICS CONCENTRATION) DEGREE

I. Economics Requirements

Core courses needed for concentration 19
- ACC.101 Principles of Financial Accounting
- ACC.102 Principles of Managerial Accounting
- ECO.202 Principles of Micro Economics
- BUS.100 Introduction to Business
- MAT.130 College Algebra
- MAT.135 Calculus for Business Or Social Sciences

II. General Education Requirements 37

A. Communications 9
- ENG.101 Freshman Composition 1
- ENG.102 Freshman Composition 2
- SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9

Select one course from Fine Arts:
- ART.111 Art Appreciation
- ART.112 Art: Prehistoric to 1400
- ART.113 Art: 1400 to Present Day
- ENG.151 Introduction to Film Art
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- THE.110 Theatre Arts Appreciation
- THE.111 Theatre History

Select one course from Humanities:
- PHL.102 Ethics (Recommended)
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.231 British Literature 1
- ENG.232 British Literature 2
- ENG.240 Women and Literature
- MUS.205 Music and Society
- PHL.100 Logic
- PHL.101 Introduction to Philosophy

Select three additional hours from either Humanities or Fine Arts

C. Social Sciences 9
- ECO.201 Principles of Macro Economics
- PSY.101 Introduction to Psychology
- or SOC.101 Introduction to Sociology

Choose one course from the following
- GEO.100 Human Geography
- GEO.110 World Regional Geography

D. Science/Mathematics 10

Select one course from Life Sciences:
- BIO.101 General Biology
- BIO.102 General Zoology
- BIO.103 General Botany
- BIO.120 Environmental Science
- BIO.205 Human Biology

Select one course from Physical Sciences:
- CHM.100 Concepts of Chemistry
- CHM.110 General Chemistry 1
- ESC.100 Introduction to Earth Science
- PHY.130 The Physical Universe
- PHY.151 General Physics 1

Math 3
- MAT.110 General Education Statistics
- or MAT.210 Statistics

II. Electives 21

III. Other Requirements 3

Human Relations Course — Select one course from the following:
- ART.111 Art Appreciation
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- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.250 African American Literature
- GEO.100 Human Geography
- GEO.110 World Regional Geography
- HIS.125 Western Civilization 1
- HIS.126 Western Civilization 2
- HIS.285 History of Africa: 1500 to Present
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- MUS.205 Music and Society
- PHL.102 Ethics
- PHL.103 Biomedical Ethics
- PSY.204 Social Psychology
- SOC.101 Introduction to Sociology
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</table>

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** | 61
AA CHEMISTRY CONCENTRATION

Associate in Arts (Chemistry Concentration)

ASSOCIATE IN ARTS (Chemistry CONCENTRATION) DEGREE

I. Chemistry Requirements
Core courses needed for concentration 25
MAT.130 College Algebra 4
MAT.140 Trigonometry 3
CHM.120 General Chemistry 1 4
CHM.210 Organic Chemistry 1 5
CHM.220 Organic Chemistry 2 4
MAT.240 Calculus With Analytic Geometry 2 5

II. General Education Requirements 37
A. Communications 9
ENG.101 Freshman Composition 1 *
ENG.102 Freshman Composition 2 **
SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
ART.111 Art Appreciation
ART.112 Art: Prehistoric to 1400
ART.113 Art: 1400 to Present Day
ENG.151 Introduction to Film Art
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.107 Music in the Theatre
THE.110 Theatre Arts Appreciation
THE.111 Theatre History

Humansities:
Select one course from Humanities:
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHL.100 Logic
PHL.101 Introduction to Philosophy
PHL.102 Ethics

Select three additional hours from either Humanities or Fine Arts
C. Social Sciences 9
Select three courses from the following:

(Must select one or more courses from 3 subject areas)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>ECO.101</td>
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<tr>
<td>HIS.125</td>
<td>Western Civilization 1</td>
</tr>
<tr>
<td>HIS.126</td>
<td>Western Civilization 2</td>
</tr>
<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present</td>
</tr>
<tr>
<td>POS.122</td>
<td>American Government &amp; Politics</td>
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<td>POS.223</td>
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</tr>
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<td>POS.267</td>
<td>Comparative Government</td>
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<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
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<td>PSY.206</td>
<td>The Social Psychology of Aging</td>
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<td>Introduction to Sociology</td>
</tr>
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<td>Contemporary Social Problems</td>
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<td>SOC.103</td>
<td>Marriage and the Family</td>
</tr>
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<td>Intro to Cultural Anthropology</td>
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<tr>
<td>SOC.260</td>
<td>Gender &amp; Society</td>
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<td>SSC.110</td>
<td>Global Issues</td>
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<td>MAT.240</td>
<td>Calculus With Analytic Geometry 1</td>
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</table>

III. Electives 21

III. Other Requirements 3

Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
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<td>Music and Society</td>
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<td>Ethics</td>
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<td>Global Issues</td>
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<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

Total Hours Required For Degree 61
## AA CREATIVE WRITING CONCENTRATION

### Associate in Arts (Creative writing concentration) Degree

#### I. English-Creative Writing Requirements

Core courses needed for concentration 12  
- ENG.211 Creative Writing 1  
- ENG.212 Creative Writing 2  
- ENG.221 American Literature 1  
- ENG.222 American Literature 2  
- ENG.180 Introduction to Poetry (Recommended)  
- ENG.240 Women and Literature (Recommended)

#### II. General Education Requirements 37

A. Communications 9  
- ENG.101 Freshman Composition 1  
- ENG.102 Freshman Composition 2  
- SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9  
- ENG.151 Introduction to Film Art  
- Fine Arts:  
  - ENG.160 Introduction to Fiction  
  - ENG.170 Introduction to Drama

C. Social Sciences 9  
- Select three courses from the following: (Must select one or more courses from 3 subject areas)  
  - ECO.101 Introduction to Economics  
  - ECO.201 Principles of Macro Economics  
  - ECO.202 Principles of Micro Economics  
  - GEO.100 Human Geography  
  - GEO.110 World Regional Geography  
  - HIS.105 American History to 1877  
  - HIS.106 American History From 1877  
  - HIS.125 Western Civilization 1  
  - HIS.126 Western Civilization 2  
  - HIS.285 History of Africa: 1500 to Present  
  - POS.122 American Government & Politics  
  - POS.223 State & Local Government  
  - POS.228 International Relations  
  - POS.267 Comparative Government  
  - PSY.101 Introduction to Psychology  
  - PSY.204 Social Psychology  
  - PSY.206 The Social Psychology of Aging  
  - PSY.221 Child Psychology  
  - PSY.265 Developmental Psychology  
  - SOC.101 Introduction to Sociology  
  - SOC.102 Contemporary Social Problems  
  - SOC.103 Marriage and the Family  
  - SOC.105 Intro to Cultural Anthropology  
  - SOC.201 Introduction to Anthropology  
  - SOC.203 Introduction to Diversity  
  - SOC.260 Gender & Society  
  - SSC.110 Global Issues

D. Science/Mathematics 10  
- Select one course from Life Sciences:  
  - BIO.101 General Biology  
  - BIO.102 General Zoology  
  - BIO.103 General Botany  
  - BIO.120 Environmental Science  
  - BIO.205 Human Biology  
- Select one course from Physical Sciences:  
  - CHM.100 Concepts of Chemistry  
  - CHM.110 General Chemistry 1  
  - ESC.100 Introduction to Earth Science  
  - PHY.130 The Physical Universe  
  - PHY.151 General Physics 1

Math 3  
- Select one course from the following:  
  - MAT.109 Concepts of Mathematics  
  - MAT.131 Finite Mathematics  
  - MAT.135 Calculus for Business Or Socil Sciences  
  - MAT.210 Statistics  
  - MAT.240 Calculus With Analytic Geometry 1  
  - MAT.241 Calculus With Analytic Geometry 2  
  - MAT.242 Calculus With Analytic Geometry 3  
  - SSC.120 Statistics for Social Science (One or the other, but not both.)  
  - or MAT.110 General Education Statistics

#### III. Electives 21

#### III. Other Requirements 3

### Human Relations Course — Select one course from the following:

- ART.111 Art Appreciation  
- ART.13 Art: 1400 to Present Day  
- ENG.160 Introduction to Fiction  
- ENG.170 Introduction to Drama  
- ENG.180 Introduction to Poetry  
- ENG.221 American Literature 1  
- ENG.222 American Literature 2  
- ENG.250 African American Literature  
- GEO.100 Human Geography  
- GEO.110 World Regional Geography  
- HIS.125 Western Civilization 1  
- HIS.126 Western Civilization 2  
- HIS.285 History of Africa: 1500 to Present  
- MUS.100 Music in the Western World  
- MUS.101 Introduction to American Music  
- MUS.105 Non-Western Music  
- MUS.205 Music and Society  
- PHL.102 Ethics  
- PHL.103 Biomedical Ethics
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<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
</tr>
</tbody>
</table>

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course.
# AA CRIMINAL JUSTICE CONCENTRATION

## Associate in Arts (criminal justice concentration) Degree

### I. Criminal Justice Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
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<td>CRM.101</td>
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<td>CRM.121</td>
<td>Juvenile Justice</td>
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<td>CRM.141</td>
<td>Introduction to Corrections</td>
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<tr>
<td>CRM.261</td>
<td>Criminal Law</td>
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</tr>
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<td>CRM.271</td>
<td>Criminal Investigation</td>
<td>3</td>
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### II. General Education Requirements

#### A. Communications

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>ENG.101</td>
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<td>ENG.102</td>
<td>Freshman Composition 2</td>
<td>3</td>
</tr>
<tr>
<td>SPE.120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

#### B. Humanities/Fine Arts

Select one course from Fine Arts:

- ART.111 Art Appreciation
- ART.112 Art: Prehistoric to 1400
- ART.113 Art: 1400 to Present Day
- ENG.151 Introduction to Film Art
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- THE.110 Theatre Arts Appreciation
- THE.111 Theatre History

Select one course from Humanities:

- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.231 British Literature 1
- ENG.232 British Literature 2
- ENG.240 Women and Literature
- MUS.205 Music and Society
- PHL.100 Logic
- PHL.101 Introduction to Philosophy
- PHL.102 Ethics

Select three additional hours from either Humanities or Fine Arts

#### C. Social Sciences

Take the following:

- PSY.101 Introduction to Psychology
- SOC.101 Introduction to Sociology

Take one course from the following:

- ECO.101 Introduction to Economics
- ECO.201 Principles of Macro Economics
- ECO.202 Principles of Micro Economics

### III. Electives

21 Hours

### IV. Other Requirements

3 Hours

Human Relations Course — Select one course from the following:

- ART.111 Art Appreciation
- ART.113 Art: 1400 to Present Day
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.250 African American Literature
- GEO.100 Human Geography
- GEO.110 World Regional Geography
- HIS.125 Western Civilization 1
- HIS.126 Western Civilization 2
- HIS.285 History of Africa: 1500 to Present
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- MUS.205 Music and Society
- PHL.102 Ethics
- PHL.103 Biomedical Ethics
- PSY.204 Social Psychology
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<td>SOC.102</td>
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<td>Global Issues</td>
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<td>THE.110</td>
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AA ELEMENTARY EDUCATION CONCENTRATION

Associate in Arts (Elementary Education concentration) Degree

I. Elementary Education Requirements

Core courses needed for concentration: 13

- CHD.102 Child Growth & Development
- CHD.204 Exceptional Children
- ECO.101 Introduction to Economics
- MAT.130 College Algebra
- EDU.101 Introduction to Education (Recommended)
- EDU.201 Educational Psychology (Recommended)

II. General Education Requirements: 37

A. Communications: 9

- ENG.101 Freshman Composition 1 *
- ENG.102 Freshman Composition 2 **
- SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts: 9

Select one course from Fine Arts:

- ART.111 Art Appreciation
- ART.112 Art: Prehistoric to 1400
- ART.113 Art: 1400 to Present Day
- ENG.151 Introduction to Film Art
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- THE.110 Theatre Arts Appreciation
- THE.111 Theatre History

Select one course from Humanities:

- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.231 British Literature 1
- ENG.232 British Literature 2
- ENG.240 Women and Literature
- MUS.205 Music and Society
- PHL.100 Logic
- PHL.101 Introduction to Philosophy
- PHL.102 Ethics

Select three additional hours from either Humanities or Fine Arts: 9

C. Social Sciences:

- HIS.105 American History to 1877
- HIS.106 American History From 1877
- GEO.110 World Regional Geography
- POS.122 American Government & Politics

D. Science/Mathematics: 10

- MAT.110 General Education Statistics
- MATH **

III. Electives: 21

Select one course from Life Sciences:

- BIO.101 General Biology
- BIO.102 General Zoology
- BIO.103 General Botany
- BIO.120 Environmental Science
- BIO.205 Human Biology

Select one course from Physical Sciences:

- CHM.100 Concepts of Chemistry
- CHM.110 General Chemistry 1
- ESC.100 Introduction to Earth Science
- PHY.130 The Physical Universe
- PHY.151 General Physics 1

Math: 3

MAT.110 General Education Statistics: 3

Human Relations Course — Select one course from the following:

- ART.111 Art Appreciation
- ART.113 Art: 1400 to Present Day
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.250 African American Literature
- GEO.100 Human Geography
- HIS.125 Western Civilization 1
- HIS.126 Western Civilization 2
- HIS.285 History of Africa: 1500 to Present
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- MUS.205 Music and Society
- PHL.102 Ethics
- PHL.103 Biomedical Ethics
- PSY.204 Social Psychology
- SOC.101 Introduction to Sociology
- SOC.102 Contemporary Social Problems
- SOC.105 Intro to Cultural Anthropology
- SOC.201 Introduction to Anthropology
- SOC.203 Introduction to Diversity
- SOC.260 Gender & Society
- SPE.110 Interpersonal Communication
- SSC.110 Global Issues
- THE.110 Theatre Arts Appreciation

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

Total Hours Required For Degree: 61

* Students must pass with a grade of "C" or better and pass the exit examination.
** Students must pass with a grade of "C" or better.
*** at least one course must be a lab course
AA ENGLISH-LITERATURE & LANGUAGE CONCENTRATION

Associate in Arts (English-Literature & Language concentration) Degree

I. English-Literature & Language Requirements
Core courses needed for concentration  12
ENG.180  Introduction to Poetry
ENG.221  American Literature 1
ENG.222  American Literature 2
ENG.240  Women and Literature
ENG.231  British Literature 1 (Recommended)
ENG.232  British Literature 2 (Recommended)

II. General Education Requirements  37
A. Communications  9
ENG.101  Freshman Composition 1*
ENG.102  Freshman Composition 2**
SPE.120  Introduction to Public Speaking

B. Humanities/Fine Arts  9
Select one course from Fine Arts:
ART.111  Art Appreciation
ART.112  Art: Prehistoric to 1400
ART.113  Art: 1400 to Present Day
ENG.151  Introduction to Film Art
MUS.100  Music in the Western World
MUS.101  Introduction to American Music
MUS.105  Non-Western Music
THE.110  Theatre Arts Appreciation
THE.111  Theatre History

Humanities:
Take the following  3
ENG.160  Introduction to Fiction
ENG.170  Introduction to Drama

C. Social Sciences  9
Select three courses from the following:
(Must select one or more courses from 3 subject areas)
ECO.101  Introduction to Economics
ECO.201  Principles of Macroeconomics
ECO.202  Principles of Micro Economics
GEO.100  Human Geography
GEO.110  World Regional Geography
HIS.105  American History to 1877
HIS.106  American History From 1877
HIS.125  Western Civilization 1
HIS.126  Western Civilization 2
HIS.285  History of Africa: 1500 to Present
POS.122  American Government & Politics
POS.223  State & Local Government
POS.228  International Relations
POS.267  Comparative Government

III. Electives  21

D. Science/Mathematics  10
Science  7
Select one course from Life Sciences:
BIO.101  General Biology
BIO.102  General Zoology
BIO.103  General Botany
BIO.120  Environmental Science
BIO.205  Human Biology
Select one course from Physical Sciences:
CHM.100  Concepts of Chemistry
CHM.110  General Chemistry 1
ESC.100  Introduction to Earth Science
PHY.130  The Physical Universe
PHY.151  General Physics 1

Math  3
Select one course from the following:
MAT.109  Concepts of Mathematics
MAT.131  Finite Mathematics
MAT.135  Calculus for Business Or Social Sciences  4
MAT.210  Statistics
MAT.240  Calculus With Analytic Geometry 1
MAT.241  Calculus With Analytic Geometry 2
MAT.242  Calculus With Analytic Geometry 3

SSC.120  Statistics for Social Science (One or the other, but not both.)
or MAT.110  General Education Statistics

II. Other Requirements  3

Human Relations Course – Select one course from the following:
ART.111  Art Appreciation
ART.113  Art: 1400 to Present Day
ENG.160  Introduction to Fiction
ENG.170  Introduction to Drama
ENG.180  Introduction to Poetry
ENG.221  American Literature 1
ENG.222  American Literature 2
ENG.250  American American Literature
GEO.100  Human Geography
GEO.110  World Regional Geography
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree**

61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AA HISTORY CONCENTRATION

Associate in Arts (History Concentration) Degree

I. History Requirements
Core courses needed for concentration 9
- HIS.106 American Hist From 1877
- HIS.125 Western Civilization 1
- HIS.126 Western Civilization 2
- SSC.202 Perspectives of Social Science (Recommended)

II. General Education Requirements 37
A. Communications 9
- ENG.101 Freshman Composition 1
- ENG.102 Freshman Composition 2
- SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
- ART.111 Art Appreciation
- ART.112 Art: Prehistoric to 1400
- ART.113 Art: 1400 to Present Day
- ENG.151 Introduction to Film Art
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- THE.110 Theatre Arts Appreciation
- THE.111 Theatre History

Select one course from Humanities:
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.231 British Literature 1
- ENG.232 British Literature 2
- ENG.240 Women and Literature
- MUS.205 Music and Society
- PHL.100 Logic
- PHL.101 Introduction to Philosophy
- PHL.102 Ethics

Select three additional hours from either Humanities or Fine Arts
C. Social Sciences 9
Take the following
- HIS.105 American History to 1877

Select two courses from the following, minimum two subject areas
- ECO.101 Introduction to Economics
- ECO.201 Principles of Macro Economics
- ECO.202 Principles of Micro Economics
- GEO.100 Human Geography
- GEO.110 World Regional Geography
- POS.122 American Government & Politics
- POS.223 State & Local Government

III. Electives 21

III. Other Requirements 3

Human Relations Course — Select one course from the following:
- ART.111 Art Appreciation
- ART.113 Art: 1400 to Present Day
- ENG.160 Introduction to Fiction
- ENG.170 Introduction to Drama
- ENG.180 Introduction to Poetry
- ENG.221 American Literature 1
- ENG.222 American Literature 2
- ENG.250 African American Literature
- GEO.100 Human Geography
- GEO.110 World Regional Geography
- HIS.285 History of Africa: 1500 to Present
- MUS.100 Music in the Western World
- MUS.101 Introduction to American Music
- MUS.105 Non-Western Music
- MUS.205 Music and Society
- PHL.102 Ethics
- PHL.103 Biomedical Ethics
- PSY.204 Social Psychology

Other courses include:
- POS.228 International Relations
- POS.267 Comparative Government
- PSY.101 Introduction to Psychology
- PSY.204 Social Psychology
- PSY.206 The Social Psychology of Aging
- PSY.221 Child Psychology
- PSY.265 Developmental Psychology
- SOC.101 Introduction to Sociology
- SOC.102 Contemporary Social Problems
- SOC.103 Marriage and the Family
- SOC.105 Intro to Cultural Anthropology
- SOC.201 Introduction to Anthropology
- SOC.203 Introduction to Diversity
- SOC.260 Gender & Society
- SSC.110 Global Issues
- SSC.120 Statistics for Social Science
- CHM.100 Concepts of Chemistry
- CHM.110 General Chemistry 1
- ESC.100 Introduction to Earth Science
- PHY.130 The Physical Universe
- PHY.151 General Physics 1
- Math 3

Total hours required: 60
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOC.102</td>
<td>Contemporary Social Problems</td>
</tr>
<tr>
<td>SOC.105</td>
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<td>Introduction to Diversity</td>
</tr>
<tr>
<td>SOC.260</td>
<td>Gender &amp; Society</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
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<tr>
<td>SSC.110</td>
<td>Global Issues</td>
</tr>
<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
</tr>
</tbody>
</table>

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AA MATHEMATICS CONCENTRATION

ASSOCIATE IN ARTS (MATHEMATICS CONCENTRATION)

Associate in Arts Degree (Mathematics concentration) degree

I. Mathematics Requirements
Core courses needed for concentration 19
MAT.130 College Algebra
MAT.140 Trigonometry
MAT.241 Calculus With Analytic Geometry 2
MAT.242 Calculus With Analytic Geometry 3
MAT.260 Differential Equations

II. General Education Requirements 37
A. Communications 9
ENG.101 Freshman Composition 1 *
ENG.102 Freshman Composition 2 **
SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
ART.111 Art Appreciation
ART.112 Art: Prehistoric to 1400
ART.113 Art: 1400 to Present Day
ENG.151 Introduction to Film Art
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.107 Music in the Theatre
THE.110 Theatre Arts Appreciation
THE.111 Theatre History
Select one course from Humanities:
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHL.100 Logic
PHL.101 Introduction to Philosophy
PHL.102 Ethics
Select three additional hours from either Humanities or Fine Arts
C. Social Sciences 9
Select three courses from the following:
(Must select one or more courses from 3 subject areas)
ECO.101 Introduction to Economics

ECO.201 Principles of Macro Economics
ECO.202 Principles of Micro Economics
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.105 American History to 1877
HIS.106 American Hist From 1877
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
POS.122 American Government & Politics
POS.223 State & Local Government
POS.228 International Relations
POS.267 Comparative Government
PSY.101 Introduction to Psychology
PSY.204 Social Psychology
PSY.206 The Social Psychology of Aging
PSY.221 Child Psychology
PSY.265 Developmental Psychology
SOC.101 Introduction to Sociology
SOC.102 Contemporary Social Problems
SOC.103 Marriage and the Family
SOC.105 Intro to Cultural Anthropology
SOC.201 Introduction to Anthropology
SOC.203 Introduction to Diversity
SOC.260 Gender & Society
SSC.110 Global Issues

D. Science/Mathematics 10
Science **** 7
Select one course from Life Sciences:
BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology
Select one course from Physical Sciences:
CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
ESC.100 Introduction to Earth Science
PHY.130 The Physical Universe
PHY.151 General Physics 1

Math 3
Take the following course:
MAT.240 Calculus With Analytic Geometry 1

III. Electives 21

IV. Other Requirements 3
Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

Total Hours Required For Degree 61

* Students must pass with a grade of "C" or better and pass the exit examination.
** Students must pass with a grade of "C" or better.
*** at least one course must be a lab course
AA POLITICAL SCIENCE
CONCENTRATION

Associate in Arts (political science concentration) Degree

I. Political Science Requirements
Core courses needed for concentration 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS.223</td>
<td>State &amp; Local Government</td>
</tr>
<tr>
<td>POS.228</td>
<td>International Relations</td>
</tr>
<tr>
<td>POS.267</td>
<td>Comparative Government</td>
</tr>
<tr>
<td>SSC.202</td>
<td>Perspectives of Social Science (Recommended)</td>
</tr>
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</table>

II. General Education Requirements 37

A. Communications 9

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1 *</td>
</tr>
<tr>
<td>ENG.102</td>
<td>Freshman Composition 2 **</td>
</tr>
<tr>
<td>SPE.120</td>
<td>Introduction to Public Speaking</td>
</tr>
</tbody>
</table>

B. Humanities/Fine Arts 9

Select one course from Fine Arts:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART.111</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ART.112</td>
<td>Art: Prehistoric to 1400</td>
</tr>
<tr>
<td>ART.113</td>
<td>Art: 1400 to Present Day</td>
</tr>
<tr>
<td>ENG.151</td>
<td>Introduction to Film Art</td>
</tr>
<tr>
<td>MUS.100</td>
<td>Music in the Western World</td>
</tr>
<tr>
<td>MUS.101</td>
<td>Introduction to American Music</td>
</tr>
<tr>
<td>MUS.105</td>
<td>Non-Western Music</td>
</tr>
<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
</tr>
<tr>
<td>THE.111</td>
<td>Theatre History</td>
</tr>
</tbody>
</table>

Select one course from Humanities:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG.160</td>
<td>Introduction to Fiction</td>
</tr>
<tr>
<td>ENG.170</td>
<td>Introduction to Drama</td>
</tr>
<tr>
<td>ENG.180</td>
<td>Introduction to Poetry</td>
</tr>
<tr>
<td>ENG.221</td>
<td>American Literature 1</td>
</tr>
<tr>
<td>ENG.222</td>
<td>American Literature 2</td>
</tr>
<tr>
<td>ENG.231</td>
<td>British Literature 1</td>
</tr>
<tr>
<td>ENG.232</td>
<td>British Literature 2</td>
</tr>
<tr>
<td>ENG.240</td>
<td>Women and Literature</td>
</tr>
<tr>
<td>MUS.205</td>
<td>Music and Society</td>
</tr>
<tr>
<td>PHL.100</td>
<td>Logic</td>
</tr>
<tr>
<td>PHL.101</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHL.102</td>
<td>Ethics</td>
</tr>
</tbody>
</table>

Select three additional hours from either Humanities or Fine Arts

C. Social Sciences 9

Take the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>POS.122</td>
<td>American Government &amp; Politics</td>
</tr>
</tbody>
</table>

Select two courses from the following, minimum two subject areas

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO.101</td>
<td>Introduction to Economics</td>
</tr>
<tr>
<td>ECO.201</td>
<td>Principles of Macro Economics</td>
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<td>ECO.202</td>
<td>Principles of Micro Economics</td>
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<tr>
<td>GEO.100</td>
<td>Human Geography</td>
</tr>
<tr>
<td>GEO.110</td>
<td>World Regional Geography</td>
</tr>
<tr>
<td>HIS.105</td>
<td>American History to 1877</td>
</tr>
<tr>
<td>HIS.106</td>
<td>American Hist From 1877</td>
</tr>
<tr>
<td>HIS.125</td>
<td>Western Civilization 1</td>
</tr>
<tr>
<td>HIS.126</td>
<td>Western Civilization 2</td>
</tr>
<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present</td>
</tr>
<tr>
<td>PSY.101</td>
<td>Introduction to Psychology</td>
</tr>
<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY.206</td>
<td>The Social Psychology of Aging</td>
</tr>
<tr>
<td>PSY.221</td>
<td>Child Psychology</td>
</tr>
<tr>
<td>PSY.265</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOC.102</td>
<td>Contemporary Social Problems</td>
</tr>
<tr>
<td>SOC.103</td>
<td>Marriage and the Family</td>
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<tr>
<td>SOC.260</td>
<td>Gender &amp; Society</td>
</tr>
<tr>
<td>SSC.110</td>
<td>Global Issues</td>
</tr>
<tr>
<td>SSC.120</td>
<td>Statistics for Social Science</td>
</tr>
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</table>

D. Science/Mathematics 10

Science 7

Select one course from Life Sciences:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIO.101</td>
<td>General Biology</td>
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<td>BIO.102</td>
<td>General Zoology</td>
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<td>BIO.103</td>
<td>General Botany</td>
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<td>BIO.120</td>
<td>Environmental Science</td>
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<tr>
<td>BIO.205</td>
<td>Human Biology</td>
</tr>
</tbody>
</table>

Select one course from Physical Sciences:

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHM.100</td>
<td>Concepts of Chemistry</td>
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<td>CHM.110</td>
<td>General Chemistry 1</td>
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<tr>
<td>ESC.100</td>
<td>Introduction to Earth Science</td>
</tr>
<tr>
<td>PHY.130</td>
<td>The Physical Universe</td>
</tr>
<tr>
<td>PHY.151</td>
<td>General Physics 1</td>
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</table>

Math 3

<table>
<thead>
<tr>
<th>Course Code</th>
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</thead>
<tbody>
<tr>
<td>SSC.120</td>
<td>Statistics for Social Science</td>
</tr>
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</table>

II. Electives 21

III. Other Requirements 3

Human Relations Course — Select one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ART.111</td>
<td>Art Appreciation</td>
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<tr>
<td>ART.113</td>
<td>Art: 1400 to Present Day</td>
</tr>
<tr>
<td>ENG.160</td>
<td>Introduction to Fiction</td>
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<td>ENG.170</td>
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<td>ENG.250</td>
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<td>Human Geography</td>
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<tr>
<td>HIS.125</td>
<td>Western Civilization 1</td>
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<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present</td>
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<tr>
<td>MUS.100</td>
<td>Music in the Western World</td>
</tr>
<tr>
<td>MUS.101</td>
<td>Introduction to American Music</td>
</tr>
</tbody>
</table>
MUS.105  Non-Western Music
MUS.205  Music and Society
PHL.102  Ethics
PHL.103  Biomedical Ethics
PSY.204  Social Psychology
SOC.101  Introduction to Sociology
SOC.102  Contemporary Social Problems
SOC.105  Intro to Cultural Anthropology
SOC.201  Introduction to Anthropology
SOC.203  Introduction to Diversity
SOC.260  Gender & Society
SPE.110  Interpersonal Communication
SSC.110  Global Issues
THE.110  Theatre Arts Appreciation

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

Total Hours Required For Degree 61

* Students must pass with a grade of "C" or better and pass the exit examination.
** Students must pass with a grade of "C" or better.
*** at least one course must be a lab course
AA PSYCHOLOGY CONCENTRATION

Associate in Arts (psychology concentration) Degree

I. Psychology Requirements
Core courses needed for concentration 12
1. PSY.204 Social Psychology
2. PSY.206 The Social Psychology of Aging
3. PSY.265 Developmental Psychology
4. PSY.294 Abnormal Psychology
5. SSC.202 Perspectives of Social Science (Recommended)

II. General Education Requirements 37
A. Communications 9
1. ENG.101 Freshman Composition 1 *
2. ENG.102 Freshman Composition 2 **
3. SPE.120 Introduction to Public Speaking

B. Humanities/Fine Arts 9
Select one course from Fine Arts:
1. ART.111 Art Appreciation
2. ART.112 Art: Prehistoric to 1400
3. ART.113 Art: 1400 to Present Day
4. ENGL.151 Introduction to Film Art
5. MUS.100 Music in the Western World
6. MUS.101 Introduction to American Music
7. MUS.105 Non-Western Music
8. THE.110 Theatre Arts Appreciation
9. THE.111 Theatre History
Select one course from Humanities:
1. ENG.160 Introduction to Fiction
2. ENG.170 Introduction to Drama
3. ENG.180 Introduction to Poetry
4. ENG.221 American Literature 1
5. ENG.222 American Literature 2
6. ENG.231 British Literature 1
7. ENG.232 British Literature 2
8. ENG.240 Women and Literature
9. MUS.205 Music and Society
10. PHL.100 Logic
11. PHL.101 Introduction to Philosophy
12. PHL.102 Ethics
Select three additional hours from either Humanities or Fine Arts 9

C. Social Sciences 9
Take the following
1. PSY.101 Introduction to Psychology
Take two courses from the following, minimum two subject areas 12
1. ECO.101 Introduction to Economics
2. ECO.201 Principles of Macro Economics
3. ECO.202 Principles of Micro Economics
4. GEO.100 Human Geography

III. Electives 21

IV. Other Requirements 3
Human Relations Course — Select one course from the following:
1. ART.111 Art Appreciation
2. ART.113 Art: 1400 to Present Day
3. ENGL.160 Introduction to Fiction
4. ENGL.170 Introduction to Drama
5. ENGL.180 Introduction to Poetry
6. ENG.221 American Literature 1
7. ENG.222 American Literature 2
8. ENG.250 African American Literature
9. GEO.100 Human Geography
10. GEO.110 World Regional Geography
11. HIS.125 Western Civilization 1
12. HIS.126 Western Civilization 2
13. HIS.285 History of Africa: 1500 to Present
14. LAW.122 American Government & Politics
15. LAW.223 State & Local Government
16. POL.228 International Relations
17. POL.267 Comparative Government
18. SOC.101 Introduction to Sociology
19. SOC.102 Contemporary Social Problems
20. SOC.103 Marriage and the Family
21. SOC.105 Intro to Cultural Anthropology
22. SOC.201 Introduction to Anthropology
23. SOC.203 Introduction to Diversity
24. SOC.260 Gender & Society
25. SSC.110 Global Issues

Science *** 7
Select one course from Life Sciences:
1. BIO.101 General Biology
2. BIO.102 General Zoology
3. BIO.103 General Botany
4. BIO.120 Environmental Science
5. BIO.205 Human Biology
Select one course from Physical Sciences:
1. CHM.100 Concepts of Chemistry
2. CHM.110 General Chemistry 1
3. ESC.100 Introduction to Earth Science
4. PHY.130 The Physical Universe
5. PHY.151 General Physics 1

Math 3
1. SSC.120 Statistics for Social Science

To be continued...
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>MUS.105</td>
<td>Non-Western Music</td>
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<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
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Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree**

61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AA Sociology Concentration

Associate in Arts (sociology concentration) Degree

I. Sociology Requirements
Core courses needed for concentration 12
SOC.102 Contemporary Social Problems
SOC.103 Marriage and the Family
SOC.203 Introduction to Diversity
SOC.260 Gender & Society
SOC.105 Intro to Cultural Anthropology (Recommended)
or SOC.201 Introduction to Anthropology
SSC.202 Perspectives of Social Science (Recommended)

II. General Education Requirements 37
A. Communications 9
ENG.101 Freshman Composition 1 *
ENG.102 Freshman Composition 2 **
SPE.120 Introduction to Public Speaking
B. Humanities/Fine Arts 9
Select one course from Fine Arts:
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ART.112 Art: Prehistoric to 1400
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ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHL.100 Logic
PHL.101 Introduction to Philosophy
PHL.102 Ethics
Select three additional hours from either Humanities or Fine Arts
C. Social Sciences 9
Take the following
SOC.101 Introduction to Sociology
Take two courses from the following, minimum two subject areas
ECO.101 Introduction to Economics
ECO.201 Principles of Macro Economics
ECO.202 Principles of Micro Economics
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.105 American History to 1877
HIS.106 American Hist From 1877
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
POS.122 American Government & Politics
POS.223 State & Local Government
POS.228 International Relations
POS.267 Comparative Government
PSY.101 Introduction to Psychology
PSY.204 Social Psychology
PSY.206 The Social Psychology of Aging
PSY.221 Child Psychology
PSY.265 Developmental Psychology
SSC.110 Global Issues
D. Science/Mathematics 7
Science ***
Select one course from Life Sciences:
BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology
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CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
ESC.100 Introduction to Earth Science
PHY.130 The Physical Universe
PHY.151 General Physics 1
Math 3
SSC.120 Statistics for Social Science

II. Electives 21

III. Other Requirements 3
Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS.105</td>
<td>Non-Western Music</td>
</tr>
<tr>
<td>MUS.205</td>
<td>Music and Society</td>
</tr>
<tr>
<td>PHL.102</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHL.103</td>
<td>Biomedical Ethics</td>
</tr>
<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>SSC.110</td>
<td>Global Issues</td>
</tr>
<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
</tr>
</tbody>
</table>

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.

** Students must pass with a grade of "C" or better.

*** at least one course must be a lab course
AS DEGREE REQUIREMENTS

Associate in Science Degree

I. General Education Requirements 39

A. Communications 9

ENG.101 Freshman Composition 1
ENG.102 Freshman Composition 2
SPE.120 Introduction to Public Speaking

B. Humanities 6

Select one course from Fine Arts:
ART.111 Art Appreciation
ART.112 Art: Prehistoric to 1400
ART.113 Art: 1400 to Present Day
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.107 Music in the Theatre
THE.110 Theatre Arts Appreciation
THE.111 Theatre History

Select one course from Humanities:
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.231 British Literature 1
ENG.232 British Literature 2
ENG.240 Women and Literature
MUS.205 Music and Society
PHL.100 Logic
PHL.101 Introduction to Philosophy
PHL.102 Ethics

C. Social Sciences 6

Select two courses from the following:
(Must select one or more courses from 2 subject areas)
ECO.101 Introduction to Economics
ECO.201 Principles of Macro Economics
ECO.202 Principles of Micro Economics
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.105 American History to 1877
HIS.106 American History From 1877
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
POS.122 American Government & Politics
POS.223 State & Local Government
POS.228 International Relations
POS.267 Comparative Government
PSY.101 Introduction to Psychology
PSY.204 Social Psychology

PSY.206 The Social Psychology of Aging
PSY.221 Child Psychology
PSY.265 Developmental Psychology
SOC.101 Introduction to Sociology
SOC.102 Contemporary Social Problems
SOC.103 Marriage and the Family
SOC.105 Intro to Cultural Anthropology
SOC.201 Introduction to Anthropology
SOC.203 Introduction to Diversity
SOC.260 Gender & Society
SSC.110 Global Issues

D. Science/Mathematics 15

Select one course from Life Sciences:
BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology

Select one course from Physical Sciences:
CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
ESC.100 Introduction to Earth Science
PHY.130 The Physical Universe
PHY.151 General Physics 1

Math 6

Select two courses from the following:
MAT.109 Concepts of Mathematics
MAT.131 Finite Mathematics
MAT.135 Calculus for Business Or Social Sciences
MAT.210 Statistics
MAT.240 Calculus With Analytic Geometry 1
MAT.241 Calculus With Analytic Geometry 2
MAT.242 Calculus With Analytic Geometry 3
SSC.120 Statistics for Social Science (One or the other, but not both.)
or MAT.110 General Education Statistics

II. Electives 22

III. Other Requirements 3

Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
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<tbody>
<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present</td>
</tr>
<tr>
<td>MUS.100</td>
<td>Music in the Western World</td>
</tr>
<tr>
<td>MUS.101</td>
<td>Introduction to American Music</td>
</tr>
<tr>
<td>MUS.105</td>
<td>Non-Western Music</td>
</tr>
<tr>
<td>MUS.205</td>
<td>Music and Society</td>
</tr>
<tr>
<td>PHL.102</td>
<td>Ethics</td>
</tr>
<tr>
<td>PHL.103</td>
<td>Biomedical Ethics</td>
</tr>
<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOC.102</td>
<td>Contemporary Social Problems</td>
</tr>
<tr>
<td>SOC.105</td>
<td>Intro to Cultural Anthropology</td>
</tr>
<tr>
<td>SOC.201</td>
<td>Introduction to Anthropology</td>
</tr>
<tr>
<td>SOC.203</td>
<td>Introduction to Diversity</td>
</tr>
<tr>
<td>SOC.260</td>
<td>Gender &amp; Society</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>SSC.110</td>
<td>Global Issues</td>
</tr>
<tr>
<td>THE.110</td>
<td>Theatre Arts Appreciation</td>
</tr>
</tbody>
</table>

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

**Total Hours Required For Degree** 61

* Students must pass with a grade of "C" or better and pass the exit examination.
** Students must pass with a grade of "C" or better.
*** at least one course must be a lab course
ASA DEGREE REQUIREMENTS

Associate in Science Degree
(Emphasis in Agriculture)

The following curriculum is designed to satisfy the basic lower division requirements for agriculture majors at most senior institutions. The agriculture classes listed below are offered in partnership with the University of Illinois-Urbana/Champaign, through a blend of Internet-based instruction and specially scheduled lab days to complete the agriculture transfer course requirements. Students enrolling in this curriculum are urged to meet with an advisor at the senior institution to review course selections and transfer plans.

Transfer Program between Carl Sandburg College and the College of Agricultural, Consumer and Environmental Sciences (ACES) University of Illinois at Urbana-Champaign.

General Information This Curriculum Guide outlines a set of required and recommended courses that may guide students at Carl Sandburg College interested in completing a Bachelor's Degree at the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois at Urbana-Champaign.

The majors offered in the College of ACES include: Agricultural and Consumer Economics, Agricultural Leadership and Science Education, Animal Sciences, Crop Sciences, Food Sciences and Human Nutrition, Horticulture, Human Development and Family Studies, Natural Resources and Environmental Sciences, Technical Systems Management.

Descriptions of each of these majors and their concentrations may be found at www.aces.illinois.edu (http://www.aces.illinois.edu). Specific recommendations for Carl Sandburg College courses that will meet the requirements for each of the majors are listed below.

To learn more about the transferability of courses not on this list, please use the U Select Website www.transfer.org (http://www.transfer.org) in conjunction with the University of Illinois General Education course listing (https://courses.illinois.edu/gened/DEFAULT/DEFAULT)https://courses.illinois.edu/gened or contact the ACES Academic Programs Office (contact info below).

Students completing the prescribed course sequences at Carl Sandburg College, meeting the stated GPA requirement, and submission of a full application with supporting documentation, will be admitted to the College of Agricultural, Consumer and Environmental Sciences (ACES) at the University of Illinois. Acceptance into a specific major and concentration will be based on the individual student’s meeting of the requirements, conditions and considerations listed for that program, including space in that major or concentration.

I. Agriculture Requirements 12

Select three courses from the following:
- AGR.121 Introduction to Animal Science
- AGR.131 Introduction to Crop Science
- AGR.151 Introductory Soil Science
- AGR.181 Introduction to Horticultural Science

II. General Education Requirements 41

A. Communications 9
- ENG.101 Freshman Composition 1 *
- ENG.102 Freshman Composition 2 **

B. Humanities 9
- Select one course from Fine Arts:
  - ART.111 Art Appreciation
  - ART.112 Art: Prehistoric to 1400
  - ART.113 Art: 1400 to Present Day
  - MUS.100 Music in the Western World
  - MUS.101 Introduction to American Music
  - MUS.105 Non-Western Music
  - MUS.107 Music in the Theatre
  - THE.110 Theatre Arts Appreciation
  - THE.111 Theatre History

- Select one course from Humanities:
  - ENG.160 Introduction to Fiction
  - ENG.170 Introduction to Drama
  - ENG.180 Introduction to Poetry
  - ENG.221 American Literature 1
  - ENG.222 American Literature 2
  - ENG.231 British Literature 1
  - ENG.232 British Literature 2
  - ENG.240 Women and Literature
  - MUS.205 Music and Society
  - PHL.100 Logic
  - PHL.101 Introduction to Philosophy
  - PHL.102 Ethics

- Select three additional hours from either Humanities or Fine Arts

C. Social Sciences 9

- Select three courses from the following:
  - ECO.101 Introduction to Economics
  - ECO.201 Principles of Macro Economics
  - ECO.202 Principles of Micro Economics
  - GEO.100 Human Geography
  - GEO.110 World Regional Geography
  - HIS.105 American History to 1877
  - HIS.106 American Hist From 1877
  - HIS.125 Western Civilization 1
  - HIS.126 Western Civilization 2
  - HIS.285 History of Africa: 1500 to Present
  - POS.122 American Government & Politics
  - POS.223 State & Local Government
  - POS.228 International Relations
  - POS.267 Comparative Government
  - PSY.101 Introduction to Psychology
  - PSY.204 Social Psychology
  - PSY.206 The Social Psychology of Aging
  - PSY.221 Child Psychology
  - PSY.265 Developmental Psychology
  - SOC.101 Introduction to Sociology
  - SOC.102 Contemporary Social Problems
  - SOC.103 Marriage and the Family
  - SOC.105 Intro to Cultural Anthropology
SOC.201 Introduction to Anthropology
SOC.203 Introduction to Diversity
SOC.260 Gender & Society

D. Science/Mathematics 14
Science ***
Select one course from Life Sciences:
BIO.101 General Biology
BIO.102 General Zoology
BIO.103 General Botany
BIO.120 Environmental Science
BIO.205 Human Biology
Select one course from Physical Sciences:
CHM.100 Concepts of Chemistry
CHM.110 General Chemistry 1
PHY.130 The Physical Universe
PHY.151 General Physics 1 (MATH)

Math 6
Select two courses from the following:
MAT.109 Concepts of Mathematics (MATH)
MAT.131 Finite Mathematics
MAT.135 Calculus for Business Or Social Sciences
MAT.210 Statistics
MAT.240 Calculus With Analytic Geometry 1
MAT.241 Calculus With Analytic Geometry 2
MAT.242 Calculus With Analytic Geometry 3
SSC.120 Statistics for Social Science (One or the other, but not both)
or MAT.110 General Education Statistics

III. Electives 8
Choose 8 credit hours from any elective area.
Credit hours may come from additional agriculture major courses.

IV. Other Requirements 3
Human Relations Course — Select one course from the following:
ART.111 Art Appreciation
ART.113 Art: 1400 to Present Day
ENG.160 Introduction to Fiction
ENG.170 Introduction to Drama
ENG.180 Introduction to Poetry
ENG.221 American Literature 1
ENG.222 American Literature 2
ENG.250 African American Literature
GEO.100 Human Geography
GEO.110 World Regional Geography
HIS.125 Western Civilization 1
HIS.126 Western Civilization 2
HIS.285 History of Africa: 1500 to Present
MUS.100 Music in the Western World
MUS.101 Introduction to American Music
MUS.105 Non-Western Music
MUS.205 Music and Society
PHL.102 Ethics
PHL.103 Biomedical Ethics
PSY.204 Social Psychology
SOC.101 Introduction to Sociology
SOC.102 Contemporary Social Problems
SOC.105 Intro to Cultural Anthropology
SOC.201 Introduction to Anthropology
SOC.203 Introduction to Diversity
SOC.260 Gender & Society
SPE.110 Interpersonal Communication
THE.110 Theatre Arts Appreciation

Residency Requirement — (Complete 15 semester hours at Sandburg)

GPA Required for Graduation — 2.0 on 4.0 scale

Minimum Credit Hours For Completion 64

* Student must pass with a grade of "C" or better and pass the exit examination.
** Students must pass with a grade of "C" or better.
*** At least one course must be a lab course.
**** ICT.110 Computer Software Applications is recommended.

Additional UIUC Requirements:

• All transfer applicants must have completed either three years of one language other than English in high school or through the second level (2 semesters) of one language other than English in college prior to the desired term of entry.
• The college’s graduation requirement is satisfied by completion through the third year of one language other than English in high school or through the third level (3 semesters) of one language other than English in college.
• If General Chemistry II is required for degree completion, it is strongly recommended that CHM.120 General Chemistry 2 be completed prior to transfer.
AFA DEGREE REQUIREMENTS

Associate in Fine Arts Degree
(Emphasis in Art)

I. General Education Requirements

A. Communications

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1 *</td>
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</tr>
<tr>
<td>ENG.102</td>
<td>Freshman Composition 2 **</td>
<td>9</td>
</tr>
<tr>
<td>SPE.120</td>
<td>Introduction to Public Speaking</td>
<td>6</td>
</tr>
</tbody>
</table>

B. Humanities

Select one or more courses from two subject areas — no fine arts courses applicable:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG.160</td>
<td>Introduction to Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENG.170</td>
<td>Introduction to Drama</td>
<td>3</td>
</tr>
<tr>
<td>ENG.180</td>
<td>Introduction to Poetry</td>
<td>3</td>
</tr>
<tr>
<td>ENG.221</td>
<td>American Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>ENG.222</td>
<td>American Literature 2</td>
<td>3</td>
</tr>
<tr>
<td>ENG.231</td>
<td>British Literature 1</td>
<td>3</td>
</tr>
<tr>
<td>ENG.232</td>
<td>British Literature 2</td>
<td>3</td>
</tr>
<tr>
<td>ENG.240</td>
<td>Women and Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHL.100</td>
<td>Logic</td>
<td>3</td>
</tr>
<tr>
<td>PHL.101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHL.102</td>
<td>Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

C. Social Sciences

Select one or more courses from at least two different disciplines:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO.101</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO.201</td>
<td>Principles of Macro Economics</td>
<td>3</td>
</tr>
<tr>
<td>ECO.202</td>
<td>Principles of Micro Economics</td>
<td>3</td>
</tr>
<tr>
<td>GEO.100</td>
<td>Human Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEO.110</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIS.105</td>
<td>American History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIS.106</td>
<td>American Hist From 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIS.125</td>
<td>Western Civilization 1</td>
<td>3</td>
</tr>
<tr>
<td>HIS.126</td>
<td>Western Civilization 2</td>
<td>3</td>
</tr>
<tr>
<td>HIS.285</td>
<td>History of Africa: 1500 to Present</td>
<td>3</td>
</tr>
<tr>
<td>POS.122</td>
<td>American Government &amp; Politics</td>
<td>3</td>
</tr>
<tr>
<td>POS.223</td>
<td>State &amp; Local Government</td>
<td>3</td>
</tr>
<tr>
<td>POS.228</td>
<td>International Relations</td>
<td>3</td>
</tr>
<tr>
<td>POS.267</td>
<td>Comparative Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY.101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY.206</td>
<td>The Social Psychology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>PSY.265</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.102</td>
<td>Contemporary Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC.103</td>
<td>Marriage and the Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC.105</td>
<td>Intro to Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.201</td>
<td>Introduction to Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.203</td>
<td>Introduction to Diversity</td>
<td>3</td>
</tr>
<tr>
<td>SOC.260</td>
<td>Gender &amp; Society</td>
<td>3</td>
</tr>
<tr>
<td>SSC.110</td>
<td>Global Issues</td>
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D. Science/Mathematics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>BIO.101</td>
<td>General Biology</td>
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<td>BIO.102</td>
<td>General Zoology</td>
<td>3</td>
</tr>
<tr>
<td>CHM.100</td>
<td>Concepts of Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHM.110</td>
<td>General Chemistry 1</td>
<td>3</td>
</tr>
<tr>
<td>PHY.130</td>
<td>The Physical Universe</td>
<td>3</td>
</tr>
<tr>
<td>PHY.151</td>
<td>General Physics 1</td>
<td>3</td>
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II. Art

Core Art Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
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<tbody>
<tr>
<td>ART.112</td>
<td>Art: Prehistoric to 1400</td>
<td>3</td>
</tr>
<tr>
<td>ART.113</td>
<td>Art: 1400 to Present Day</td>
<td>3</td>
</tr>
<tr>
<td>ART.121</td>
<td>Two Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART.122</td>
<td>Three Dimensional Design</td>
<td>3</td>
</tr>
<tr>
<td>ART.131</td>
<td>Drawing 1</td>
<td>3</td>
</tr>
<tr>
<td>ART.132</td>
<td>Drawing 2</td>
<td>3</td>
</tr>
<tr>
<td>ART.133</td>
<td>Life Drawing</td>
<td>3</td>
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</table>

Elective Art Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>ART.141</td>
<td>Painting</td>
<td>3</td>
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<tr>
<td>ART.142</td>
<td>Advanced Painting</td>
<td>3</td>
</tr>
<tr>
<td>ART.151</td>
<td>Printmaking</td>
<td>3</td>
</tr>
<tr>
<td>ART.162</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART.163</td>
<td>Digital Photography II</td>
<td>3</td>
</tr>
<tr>
<td>ART.171</td>
<td>Ceramics 1</td>
<td>3</td>
</tr>
<tr>
<td>ART.172</td>
<td>Ceramics 2</td>
<td>3</td>
</tr>
<tr>
<td>ART.193</td>
<td>Computer Art</td>
<td>3</td>
</tr>
</tbody>
</table>

III. Other Requirements

GPA Required for Graduation — 2.0 on 4.0 scale
Residency Requirement — (Complete 15 semester hours at Sandburg)

Total Hours Required For Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>64</td>
</tr>
</tbody>
</table>

* Students must pass with a grade of "C" or better and pass the proficiency examination.
** Students must pass with a grade of "C" or better.
*** One course must be a lab course.
ASSOCIATE IN GENERAL STUDIES INDIVIDUALLY DESIGNED DEGREES

This curriculum is designed for students who desire to pursue a two-year program. It is not designed to serve as a degree for transfer.

Both baccalaureate and career, technical and health education courses may be taken as a part of this program.

Graduation requirements for the Associate in General Studies degree are listed below. Review the course descriptions to determine which courses count toward the various requirements.

Associate in General Studies Degree

I. General Studies Requirements 33
   A. Communications 6
      ENGL.101 Freshman Composition 1 *
      SPE.120 Introduction to Public Speaking
   B. Humanities 9
      Art, Music, Philosophy, Literature, Foreign Language, Creative Writing, Theatre
   C. Social Sciences 9
      History, Political Science, Geography, Sociology, Psychology, Economics, Education
   D. Science/Mathematics 9
      (Must complete courses in both science and mathematics for a total of 9 hours.)
      Science
      Math

II. Electives 28
   (May include both baccalaureate & career, technical and health education credits)

III. Other
   GPA Required for Graduation — 2.0 on 4.0 scale
   Residency Requirement — (Complete 15 semester credit hours at Sandburg)

Total Hours Required For Graduation 61

* Students must pass with a grade of "C" or better and pass the exit examination.
ACCOUNTING

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Accounting)

This program is designed for the student who desires to work as an assistant to an accountant or accounting professional. Persons who take positions as accounting assistants need competence in the theory and practice of areas such as accounts receivable, accounts payable, payroll, merchandise accounting and fixed asset accounting. Standard record-keeping practices are also required. Satisfactory completion of this certificate program will provide an appropriate background for a job-entry level position as a bookkeeper or an assistant in an accounting department.

Associate in Applied Science

This program is designed for the student who desires to prepare for employment in the accounting function of many different types of organizations. Manufacturing, distribution, marketing and sales, governmental, and non-profit organizations all require competent accounting personnel to keep accurate records and provide analysis of the effect of management decisions on day-to-day business activities. Satisfactory completion of this curriculum will provide competence for positions in accounting.

Admission to the Program: Open
First-Time Enrolees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process

Department of Social & Business Sciences
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (http://catalog.sandburg.edu/academicinformation/#graduation_policies_and_procedures) page for details.

Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
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Directed Electives
Select two of the following:
- ACC.205 | Cost Accounting 3 |
- ACC.206 | Federal Income Tax 3 |
- ACC.207 | Payroll Accounting 3 |

Associate in Applied Science

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<td>BOC.104</td>
<td>Mathematics of Finance 3</td>
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<td>or MAT.135</td>
<td>or Calculus for Business Or Social Sciences</td>
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<td>or Business Law 3</td>
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ECO.101  Introduction to Economics  3
or ECO.201  or Principles of Macro Economics
or ECO.202  or Principles of Micro Economics

Total Semester Hours  62

Lara Roemer
Associate Dean of Social and Business Sciences
Instructor, History/Political Science
Advisor, Phi Theta Kappa

Keith W Williams
Assistant Professor, Economics/Business Administration
Coordinator, Business Programs

Mollisa Graham
Instructor, Accounting
**ADMINISTRATIVE OFFICE PROFESSIONS**

**Administrative Office Assistant Certificate**
(http://www.sandburg.edu/Academics/Degree-Certificates/Administrative-Office-Professions)

This curriculum prepares students with the skills needed for office work. Courses include accounting, communications, office management, customer service, computer applications, and information management. Graduates are qualified for entry-level positions in a business where a wide variety of office skills are required.

This certificate is stackable, meaning the Administrative Office Professional AAS can be completed in just two additional semesters.

**Administrative Office Professional AAS**
(http://www.sandburg.edu/Academics/Degree-Certificates/Administrative-Office-Professions)

This curriculum prepares students with the efficient skill level needed to meet the fast-paced demands of administrative/executive work. Hardware installation and maintenance, windows networking and operating systems, business communications, and report writing courses are taken to build on the knowledge and skills acquired by completing the certificate. Graduates are qualified for positions as administrative/executive assistants and office managers.

This degree is designed to build on the Administrative Office Assistant certificate.

**Admission to the Program: Open First-Time Enrollees**

1. Complete an application for admission to the College and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

**Department of Career, Technical & Health Education**

2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
309.341.5363

**For Additional Information Contact:**
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

**For Graduation Requirements:**
See the graduation policies and procedures (p. 30) page for details.

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**Certificate**

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(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

**Associate in Applied Science**

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Spring Semester

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Total Semester Hours 65

(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

Carrie Hawkinson
Associate Dean of Career, Technical and Health Education
Associate Professor, Administrative Office Professional/Business Occupations
ADVANCED ELECTRICAL AUTOMOTIVE

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Advanced-Electrical-Automotive)

Carl Sandburg College offers a one-semester certificate program in Advanced Electrical Automotive to provide further training to support students in advancing their opportunities in the auto-tech industry. Graduates will learn about more complex systems such as anti-lock brakes, traction, electrical systems, switches and sensors, powertrain and emissions control systems and high voltage electrical systems.

Nature of the Work
The work of automotive service technicians and mechanics has evolved from simply mechanical to high technology. Technicians must have an increasingly broad base of knowledge about how vehicles’ complex electronic components work and interact, as well as the ability to work with electronic diagnostic equipment and computer-based technical reference materials. Automotive service technicians and mechanics use these high tech skills to inspect, maintain, and repair vehicles. The ability to diagnose the source of a problem quickly and accurately requires good reasoning ability and a thorough knowledge of automobiles. Many technicians consider diagnosing hard-to-find troubles one of their most challenging and satisfying duties.

Employment
Job opportunities for those individuals who complete automotive training programs are expected to be very good. Persons with good diagnostic and problem-solving skills should have the best opportunity. For well-prepared people with a technical background, automotive service technicians careers offer an excellent opportunity for good pay and secure employment. To learn more about the admission requirements and the application process for this program, call 309.345.3500.

Admission to the Program: Open
First-Time Enrollees:
1. Complete an application for admission and, if desired, apply for financial aid
2. Must have an Automotive Technology certificate or degree and two years of work experience; or three years of work experience.
3. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

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<td>AUT.230</td>
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</table>

Total Semester Hours: 13

Larry E. Wright
Associate Professor, Automotive Technology

Carrie Hawkinson
Associate Dean of Career, Technical, and Health Education

The Advanced Electrical Automotive program is located in Building B. Its facilities include classroom space, faculty offices, and an automotive bay that functions as a full-service automotive shop.
AUTOMOTIVE TECHNOLOGY

Certificate (http://sandburg.edu/Academics/Degree-Certificates/Automotive%20Technology)

Carl Sandburg College offers a two-semester certificate program in Automotive Technology providing students with the basic skills to gain employment in automotive dealerships, automotive technology centers, and independent service centers.

Nature of the Work
The work of automotive service technicians and mechanics has evolved from simply mechanical to high technology. Technicians must have an increasingly broad base of knowledge about how vehicles' complex electronic components work and interact, as well as the ability to work with electronic diagnostic equipment and computer-based technical reference materials. Automotive service technicians and mechanics use these high tech skills to inspect, maintain, and repair vehicles. The ability to diagnose the source of a problem quickly and accurately requires good reasoning ability and a thorough knowledge of automobiles. Many technicians consider diagnosing hard-to-find troubles one of their most challenging and satisfying duties.

Working Conditions
Almost half of automotive service technicians work a standard 40-hour week, but about one third work over 40 hours per week. Many of those working over 40-hour weeks are self-employed technicians. Some shops offer evening and weekend service to meet the needs of their customers. Generally, service technicians work indoors in well ventilated and lighted repair shops.

Employment
Job opportunities for those individuals who complete automotive training programs are expected to be very good. Persons with good diagnostic and problem-solving skills should have the best opportunity. For well-prepared people with a technical background, automotive service technicians careers offer an excellent opportunity for good pay and secure employment. To learn more about the admission requirements and the application process for this program, call 309.345.3500.

Admission to the Program:  Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500

welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Certificate
Course  Title  Semester Hours
First Year
Fall Semester
AUT.101  Spark Ignition Engines 1  3
AUT.105  Electrical Systems  3
AUT.201  Ignition Systems  3
AUT.107  Shop Practices 1  4
AUT.110  Auto Math  2
Spring Semester
AUT.103  Braking Systems  2
AUT.202  Steering Suspension & Front Wheel Dr  3
AUT.203  Manual Transmission & Dr Trains  2
AUT.204  Automatic Transmissions  3
AUT.206  Heating and Air Conditioning  2
AUT.209  Shop Practices 2  2
Total Semester Hours  29

Larry E. Wright
Associate Professor, Automotive Technology

Carrie A. Hawkinson
Associate Dean of Career, Technical, and Health Education

The Automotive Technology program is located in Building B. Its facilities include classroom space, faculty offices, and an automotive bay as a full-service automotive shop.
**Bioprocess Professions**

**Bioprocess Technology Certificate** (http://www.sandburg.edu/Academics/Degree-Certificates/Bioprocess%20Technology)

This certificate is designed to refresh skills for individuals who have great technical skills in the manufacturing area and are looking to explore the bioprocess areas.

**Bioprocess Fermentation Technician Certificate** (http://www.sandburg.edu/Academics/Degree-Certificates/Bioprocess%20Fermentation%20Technician%20Certificate)

This certificate is designed to prepare individuals to be entry level technicians in the renewable energy and/or waste water control and treatment sectors.

**Bioprocess Operations Technician AAS**

This degree program is designed to prepare individuals to become professional technicians in the renewable energy, waste water control and treatment and/or chemical processing sectors.

**Industry Growth**

According to Illinois Renewable Fuels Association, there are 12 plants producing approximately 1 billion gallons of ethanol annually. Further, the Bureau of Labor Statistics, reports the Bioprocess industry employs over 11,000 workers with an additional 3,700 workers needed over the next 8 years.

**Admission to the Program: Open**

**First-Time Enrollees**

1. Complete an application for admission to the College and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process

**Department of Career and Corporate Development**

2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5461

**For Additional Information Contact:**

The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

**For Graduation Requirements:**

See the graduation policies and procedures (p. 30) page for details.

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**Bioprocess Technology - Certificate**

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<td>CHM.100</td>
<td>Concepts of Chemistry</td>
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<td>WEL.101</td>
<td>Fundamentals of Welding Theory</td>
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<td>WEL.103</td>
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**Total Semester Hours** 16

* (Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

**Bioprocess Fermentation Technician - Certificate**

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**Spring Semester**

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<td>Industrial Electrical Control</td>
<td>3</td>
</tr>
<tr>
<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
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</tr>
<tr>
<td>BFM.201</td>
<td>Ethanol Production</td>
<td>4</td>
</tr>
<tr>
<td>BFM.203</td>
<td>Water Treatment &amp; Control</td>
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</table>

**Total Semester Hours** 32

**Bioprocess Operations Technology AAS**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
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</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
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</tr>
<tr>
<td>BFM.101</td>
<td>Biofuels Fundamentals</td>
<td>2</td>
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<tr>
<td>CHM.100</td>
<td>Concepts of Chemistry</td>
<td>3</td>
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<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MFG.130</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td>WEL.101</td>
<td>Fundamentals of Welding Theory</td>
<td>2</td>
</tr>
<tr>
<td>WEL.103</td>
<td>Welding Survey</td>
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</table>
### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>BFM.201</td>
<td>Ethanol Production</td>
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<tr>
<td>BFM.203</td>
<td>Water Treatment &amp; Control</td>
<td>3</td>
</tr>
<tr>
<td>ELT.104</td>
<td>Industrial Electrical Control</td>
<td>3</td>
</tr>
<tr>
<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
<td>3</td>
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</table>

### Summer Session

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO.101</td>
<td>General Biology</td>
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### Second Year

### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BFM.202</td>
<td>Biodiesel Production</td>
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</tr>
<tr>
<td>ELT.119</td>
<td>Industrial Electronic Control</td>
<td>3</td>
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<tr>
<td>ELT.120</td>
<td>Electrical/Electronics Troubleshooting</td>
<td>3</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
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<tr>
<td>HYD.101</td>
<td>Hydraulics and Pneumatics</td>
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### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BFM.291</td>
<td>Professional Internship 1</td>
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</tr>
<tr>
<td>or</td>
<td></td>
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<tr>
<td>BFM.292</td>
<td>Professional Internship 2</td>
<td>3</td>
</tr>
<tr>
<td>BIO.200</td>
<td>General Microbiology</td>
<td>4</td>
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<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>BUS.100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ELT.213</td>
<td>Process Control &amp; Instrumentation</td>
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</tr>
</tbody>
</table>

**Total Semester Hours**: 68

---

**Christopher N. Banker**  
Dean of Career and Corporate Development

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College's industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College's weld lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
This program is designed for students who want to develop administrative management skills for a career in business. In addition to building general business proficiency, students are prepared for occupations in management, supervision, or marketing. Satisfactory completion of this program will provide an adequate level of competency for entry-level positions in various organizational structures, including for-profit and not-for-profit organizations.

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Social & Business Sciences
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

### Business Administration

**Associate in Applied Science** ([http://www.sandburg.edu/Academics/Degree-Certificates/Business-Administration](http://www.sandburg.edu/Academics/Degree-Certificates/Business-Administration))

This program is designed for students who want to develop administrative management skills for a career in business. In addition to building general business proficiency, students are prepared for occupations in management, supervision, or marketing. Satisfactory completion of this program will provide an adequate level of competency for entry-level positions in various organizational structures, including for-profit and not-for-profit organizations.

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

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For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

### Associate in Applied Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
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<td></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>ACC.101</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
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<td>BUS.100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BOC.107 or ICT.110</td>
<td>Tech Skills for Business Environment or Computer Software Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
<td>3</td>
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<tr>
<td>MAT.099 or MAT.130 or MAT.131</td>
<td>Intermediate Algebra or College Algebra or Finite Mathematics</td>
<td>4</td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>ACC.102</td>
<td>Principles of Managerial Accounting</td>
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<tr>
<td>BUS.201</td>
<td>Management Fundamentals</td>
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<tr>
<td>ENG.102</td>
<td>Freshman Composition 2</td>
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<tr>
<td>BUS.101</td>
<td>Marketing Fundamentals</td>
<td>3</td>
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<tr>
<td>BOC.120</td>
<td>Customer Service</td>
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<tr>
<td>BUS.114</td>
<td>Skills for Business Careers</td>
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**Second Year**

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<tr>
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<tr>
<td>BOC.102</td>
<td>Business Communications</td>
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<tr>
<td>ECO.201 or ECO.101</td>
<td>Principles of Macro Economics or Introduction to Economics</td>
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<tr>
<td>PSY.204</td>
<td>Social Psychology</td>
<td>3</td>
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<td>SPE.110 or SPE.120</td>
<td>Interpersonal Communication or Introduction to Public Speaking</td>
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<td>BUS.212</td>
<td>Human Resource Management</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>BLA.202</td>
<td>Business Law</td>
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<tr>
<td>BUS.206</td>
<td>Principles of Finance</td>
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<tr>
<td>BUS.112</td>
<td>Supervision Fundamentals</td>
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<td>BUS.208</td>
<td>Marketing Promotion</td>
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<tr>
<td>ECO.202 or BUS.291 or BUS.292</td>
<td>Principles of Micro Economics or Professional Internship 1 or Professional Internship 2</td>
<td>3</td>
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</table>

Other courses could be used upon the approval of the program coordinator or the supervising Dean/Associate Dean.

Lara Roemer
Associate Dean of Social and Business Sciences
Instructor, history/political science
Advisor, Phi Theta Kappa

Williams, Keith W
Assistant Professor, Economics/Business Administration
Coordinator, Business Programs
CISCO NETWORK ASSOCIATE

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/CISCO-Network-Associate)

The Cisco Network Associate certificate is designed to provide students with technical skills needed to become a network support specialist. This course of study also provides the student with the practical knowledge to successfully take the CCNA certification test.

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>First Year</td>
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<tr>
<td>Spring Semester</td>
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<td></td>
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<tr>
<td>ICT.160</td>
<td>Introduction to Internetworking</td>
<td>3</td>
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<tr>
<td>Second Year</td>
<td></td>
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<tr>
<td>Fall Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT.260</td>
<td>Introduction to Internetwork Operating S</td>
<td>3</td>
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<tr>
<td>Spring Semester</td>
<td></td>
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<tr>
<td>ICT.261</td>
<td>Introduction to Local Area Networks</td>
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<td>ICT.262</td>
<td>Introduction to Wide Area Networks</td>
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<td>Total Semester Hours</td>
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Total Program Hours 12.0

Carrie A. Hawkinson
Associate Dean of Career, Technical, and Health Education

Suvineetha Herath
Instructor, Information and Communication Technology
**CNC PROGRAMS**


The program will train graduates for entry level positions in the machine tool area as represented in the Manufacturing career cluster, Production pathway. Positions could include: Grinding, Lapping and Buffing Machine Operator, Milling Machine Setter, Set-Up Operator and Machine Operator. The program is being proposed to address the anticipated immediate need for trained workers for the Galesburg and area manufacturing industries in computer numerical control operations with skills in machine tooling and blueprint reading. The current employment projections from the Bureau of Labor Statistics indicate positive growth for the various machine tool operator's positions in the state and our college district. Computer-Controlled Machine Tool Operator (51-4011) shows an annual growth of 1.87% for the state and 1.93% for the college district. These numbers are reflective through 2022 for the district and state.

**Admission to the Program: Open**

**CNC Programmer Advanced Certificate**

The CNC Programmer certificate program gives an overview of essential machine shop practices including machine safety, blueprint reading and part inspection methods. CNC machine programming, set-up and operation will also be covered in depth. Graduates of this program will have the skills necessary for entry-level employment in a machine shop setting. Special emphasis will be placed on learning the skills necessary to transform raw material into a finished part. Students will be able to apply the techniques learned in lectures within a machine shop setting. Overall, this program is intended to introduce students to many different aspects within a machine shop setting.

**Admission to the Program: Open**

**First-Time Enrollees**
1. Complete an application for admission to the College and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process

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**For Additional Information Contact:**
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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
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</tr>
<tr>
<td>MFG.130</td>
<td>Industrial Safety</td>
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<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
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<td>MTL.130</td>
<td>CNC Machining Technology</td>
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<td>MTL.135</td>
<td>Fund. of CNC Machine Applications</td>
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<td><strong>Summer Session</strong></td>
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<tr>
<td>MTL.295</td>
<td>Operator Internship I</td>
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<tr>
<td>or MTL.296</td>
<td>Operator Internship II</td>
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| **Second Year**                                         |                |
| **Fall Semester**                                       |                |
| MAT.101     | Technical Mathematics 1                    | 3              |
| MTL.150    | Fund. of CNC Turning Applications          | 3              |
| MTL.155    | Fund. of CNC Milling Applications          | 3              |
| MTL.160    | CNC Lathe Set-up                           | 3              |
| MTL.165    | CNC Mill Set-up                            | 3              |
| **Spring Semester**                                     |                |
| MAT.102    | Technical Mathematics 2                    | 3              |
| MTL.200    | Fundamentals of Live Tooling               | 3              |
| MTL.205    | Live Tooling & Set-Up & Orientation        | 3              |
| MTL.210    | CNC Lathe Process                          | 3              |
| MTL.215    | CNC Mill Process                           | 3              |
| **Summer Session**                                     |                |
| MTL.297    | Programmer Internship I                    | 2              |
| or MTL.298 | or Programmer Internship II                |                |

<table>
<thead>
<tr>
<th></th>
<th><strong>Total Semester Hours</strong></th>
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<tbody>
<tr>
<td></td>
<td><strong>Total Semester Hours</strong></td>
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</tbody>
</table>

Christopher N. Banker
Dean of Career and Corporate Development

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COMPUTER SUPPORT ASSOCIATE

Computer Support Associate (http://www.sandburg.edu/Academics/Degree-Certificates/Computer%20Support%20Associate)

This program prepares students to work in career fields of computer support, maintenance and repair. Students will receive training in computer hardware, software, and support. Student will learn about computer hardware components, system operating systems, and application software. Jobs in computer maintenance can be found in such career fields as PC Support Technician, Computer Help Desk, and Computer Configuration Specialist. This certificate prepares students for the CompTia A+ and MCTS certification exams.

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Information and Communication technology Course Completion Requirement
For credit toward degree requirements, all ICT courses must have been completed during the five school years preceding conference of the degree or must have the approval of the Associate Dean of Career, Technical, and Health Education Programs or Program Coordinator.

*NOTE: Computer Support Associate Certificate conferred upon successful completion of the required 15 hours contained in the first semester of this program.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
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Phone: 309.341.5363

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<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ICT.170</td>
<td>Hardware Installation &amp; Maintenance</td>
<td>3</td>
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<tr>
<td>ICT.181</td>
<td>Windows Networking &amp; Operating Systems</td>
<td>3</td>
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<td></td>
<td>Total Semester Hours</td>
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</tr>
</tbody>
</table>

*Completion of this certificate also fulfills the first semester requirements of the Computer Technician Certificate.

Carrie Hawkinson
Associate Dean of Career, Technical, and Health Education

Suvineetha Herath
Instructor, Information and Communication Technology
COMPUTER TECHNICIAN

Computer technician Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Computer%20Technician)

This program prepares students for entry-level positions in PC installation, maintenance and repair professions. Common career titles include PC support technician, hardware specialist, help desk support specialist, hardware configuration technician, and many others. Student will examine PC software, including operating systems, office applications, network management, and desktop utilities. Courses also introduce a variety of current hardware technology, including CPU features and functions, system architecture, storage technology, backup devices, multimedia devices, and data communication equipment. This program prepares students for the CompTIA A+ and Network+ and MCTS certification exams.

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

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For credit toward degree requirements, all ICT courses must have been completed during the five school years preceding conference of the degree or must have the approval of the Associate Dean of Career, Technical, and Health Education Programs or Program Coordinator.

*NOTE: Computer Technician Certificate conferred upon successful completion of the required 29 hours contained in the first and second semesters of this program. Computer Support Associate Certificate conferred after successful completion of the first 15 hours.

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Certificate

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>First Year Fall Semester</td>
<td>BOC.107 Tech Skills for Business Environment</td>
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<td></td>
<td>ICT.170 Hardware Installation &amp; Maintenance</td>
<td>3</td>
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<td>ICT.120 Computer Information Systems</td>
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<td>ICT.160 Introduction to Internetworking</td>
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<td>ICT.181 Windows Networking &amp; Operating Systems</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td></td>
<td>BOC.120 Customer Service</td>
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<td>ICT.135 Mobile Technologies</td>
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<td></td>
<td>ICT.165 LINUX 1</td>
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<td>ICT.183 Implement Ms Network Infrastructure</td>
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<td>ICT.260 Introduction to Internetwork Operating System</td>
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</table>

Total Semester Hours 29

• Note:
  • Successful completion of this Certificate also completes Computer Support Associate Certificate.

Carrie Hawkinson
Associate Dean of Career, Technical, and Health Education

Suvineetha Herath
Instructor, Information and Communication Technology
COMPUTED TOMOGRAPHY (CT)

Advanced Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Computed-Tomography)

Computed Tomography (CT) Advanced Certificate is a one-semester program that prepares radiographers to perform CT procedures in hospitals and imaging centers.

CT is an imaging modality that combines the use of x-rays and computer technology. Cross-sectional images of the body are produced by an x-ray beam and array of detectors that encircle the patient. These images can be reconstructed in multiple planes to display anatomical structures not otherwise visible on conventional radio-graphs. The curriculum covers all subjects identified in the American Registry of Radiologic Technologists (ARRT) content specifications for examination in Computed Tomography (CT).

Working Conditions
Computed Tomography Technologists may work in a variety of health care facilities, although most are employed in hospitals or imaging centers. Technologists typically work 40-hour weeks that may include evening, weekend or “on-call” hours dependent upon their employment setting. Please refer to the Essential Skills & Abilities of MRI technologist to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
As the cost of equipment declines and smaller units become available, CT and other radiologic procedures are increasingly being used in physicians’ offices and walk-in clinics, which increases the demand for technologists to operate the machinery. With life expectancy increasing, the demands of an aging population increases the need for health care providers. It is projected that employment of Radiologic and CT technologists will increase by about 13% from 2016-2026, faster than average for all occupations. U.S. Department of Labor, Bureau of Labor Statistics.

Accreditation/Approval
Carl Sandburg College is accredited through the North Central Association of Colleges and Schools – The Higher Learning Commission, 30 LaSalle Street, Suite 2400, Chicago, IL. 60602-2504.

Licensure
Graduates are eligible to apply to take the American Registry of Radiologic Technologists A.R.R.T Post Primary Examination for Computed Tomography. This certification is nationally recognized and enables the student to pursue employment throughout the United States.

Admission Requirements: Selective
The Computed Tomography (CT) Program has limited enrollment and a selection process for admission into the program. Students must apply and be formally accepted into the program prior to enrolling in any Computed Tomography courses. Students can apply online to the Computed Tomography (CT) Program February 15 - June 15. Application deadline date is June 15 for Fall enrollment. We notify applicants approximately two weeks after application deadline date whether or not they have been accepted into the program.

1. If you have never attended Carl Sandburg College, complete a general application for admission to the College - http://sandburg.edu/admissions/steps-enroll
2. Submit official transcripts from high school and all post-secondary educational institutions.
3. Graduate from an A. R. R. T approved radiography program with a 2.5 or higher cumulative G.P.A. on a 4.0 scale.
4. Provide evidence of active registration with the A.R.R.T or registry eligible status.
5. Complete the online application for the Computed Tomography program.
6. Students admitted must attend the program orientation session.

Program admission is competitive and fulfillment of the basic requirements does not guarantee admission. Class size is limited and is determined by the number of available clinical sites within each community-college district. Participating community college districts (in addition to Carl Sandburg College) include: Black Hawk, Heartland, Illinois Central, Illinois Valley, John Wood, Lincoln Land, Parkland, Richland, Sauk Valley, Scott (IA), Southeastern (IA), and Spoon River.

RDT 255 practicum requires immunizations with titer, TB skin test, current Healthcare Provider CPR certification, drug screen, background check and physical. Students are responsible for all fees incurred. Please refer to the Computed Tomography Program Cost Sheet. Please note that findings on the criminal background check and drug screen may void the conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites. Technologists employed in CT may seek enrollment in the online classroom-only portions of the program, if desired.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.345.3500

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Advanced Certificate

Program Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDT.262</td>
<td>Sectional Anatomy for Diagnostic Imaging</td>
<td>3</td>
</tr>
<tr>
<td>RDT.250</td>
<td>CT Principles &amp; Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>RDT.252</td>
<td>Computed Tomography Procedures</td>
<td>4</td>
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<tr>
<td>RDT.255</td>
<td>CT Practicum</td>
<td>6</td>
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<tr>
<td><strong>Total Program Requirement</strong></td>
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<td></td>
</tr>
</tbody>
</table>

NOTE: In order to graduate, each student must complete all required courses with a grade of "C" or better. RDT 262, RDT 250 and RDT 252 are online courses.

Jackie D. Whipple, RT(R)
Program Coordinator/Assistant Professor, Radiologic Technology

Michael Strohmaier, RT(R), CT
CRIMINAL JUSTICE

Associate in Applied Science and Certificate

Criminal Justice Associate in Applied Science
A student completing this curriculum will be eligible for employment with various law enforcement, judiciary, and correctional agencies. Various positions in business and industrial security may also be available. A student with a criminal conviction will be admitted to the program, but may experience difficulty in securing employment in some criminal justice areas. Students transferring to a four-year criminal justice program with this degree should consult with a counselor or the Criminal Justice Coordinator for advisement on pre-enrollment requirements.

Criminal Justice Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Criminal%20Justice)
A student completing this curriculum will be eligible for employment with various criminal justice agencies. Certain private positions, such as business, industrial, and institutional security guards, may also be available. A student with a felony conviction will be admitted to the program, but may experience difficulty in securing employment in some criminal justice agencies.

Law, Public Safety, Corrections & Security
Carl Sandburg College offers students the opportunity to prepare for a wide array of careers in public service including law enforcement officers, correctional staff and private security positions. Both the public and private sector careers are readily available in many locations and include high incomes.

Program Features
Students have an opportunity to make the criminal justice program work with their schedule. The courses are offered in the day and evening on a scheduled semester outline. Students are exposed to a rich curriculum that allows for a solid foundation in all aspects of the criminal justice system.

Short-Term Benefits
- Day and evening classes; online offerings
- Small class sizes allowing for individual attention
- Quality education at an affordable price
- Range of programs to meet the students needs

Long-Term Benefits
- Graduates are prepared for the workforce and can make their degrees and certificates work for them
- Continuing education available to those in the field

The Future of Public Safety, Corrections and Security
Employers are seeking entry level applicants with an education associated with an Associate degree or higher. Agencies are seeking applicants with strong communication, writing, and leadership qualities. Applicants will need to pass several pre-hiring testing requirements which vary from agency to agency. Applicants need to be in good health, pass fitness standards and have a clear criminal background for consideration.

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5313

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Associate in Applied Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tr>
<td>CRM.101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
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<tr>
<td>CRM.102</td>
<td>Police Administration &amp; Management</td>
<td>3</td>
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<tr>
<td>CRM.231</td>
<td>Procedural Law for Police</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition</td>
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<tr>
<td>SOC.205</td>
<td>Social Problems-Professional Ethics</td>
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</tr>
<tr>
<td>CRM.261</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRM.103</td>
<td>Intro to Crime Scene Technology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.101</td>
<td>or Introduction to Sociology</td>
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<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
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<tr>
<td>SPE.110</td>
<td>or SPE.120</td>
<td>Introduction to Public Speaking</td>
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<td>CRM.141</td>
<td>Introduction to Corrections</td>
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Second Year

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<tr>
<td>CRM.121</td>
<td>Juvenile Justice</td>
<td>3</td>
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<tr>
<td>CRM.261</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CRM.103</td>
<td>Intro to Crime Scene Technology</td>
<td>3</td>
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<tr>
<td>CRM.210</td>
<td>or Introduction to Sociology</td>
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<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
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<tr>
<td>CRM.141</td>
<td>Introduction to Corrections</td>
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<tr>
<td>KIN.140</td>
<td>Physical Fitness</td>
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</table>

Total Semester Hours 60
* KIN.141 Physical Fitness 2, KIN.142 Physical Fitness 3 & KIN.143 Physical Fitness 4 also accepted.

### Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>CRM.101</td>
<td>Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CRM.102</td>
<td>Police Administration &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>CRM.231</td>
<td>Procedural Law for Police</td>
<td>3</td>
</tr>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
<td>3</td>
</tr>
<tr>
<td>SOC.205</td>
<td>Social Problems-Professional Ethics</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>CRM.121</td>
<td>Juvenile Justice</td>
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<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
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<td>CRM.141</td>
<td>Introduction to Corrections</td>
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<td><strong>Total Semester Hours</strong></td>
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<td>30</td>
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</tbody>
</table>

Lara Roemer  
Associate Dean of Social and Business Sciences  
Instructor, History/Political Science  
Advisor, Phi Theta Kappa

Christopher J. Barber  
Instructor, Criminal Justice

The Criminal Justice Program has established a Crime Lab for the development of new curriculum and supplemental instruction. The lab is a multifunction room that consists of both lecture and lab stations for computer and practical use. The area allows for students to participate in active interview and interrogation simulations, mock processing and booking, crime scene software as well as mock crime scenes. Students are introduced to five key areas of crime scene technology; latent print evidence, blood spatter and trace evidence, impression evidence, ballistics, and crime scene photography.

This space employs practical applications to many core courses within the criminal justice program. It also allows for program growth in the area of crime scene technologies and practical presentations of contemporary investigative methods.
DATABASE ASSOCIATE

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Database-Associate)

The Database Specialist is designed to provide students with technical skills needed to become a database specialist. The core curriculum centers on creating and managing databases in popular applications such as: Microsoft Access and SQL; as well as learn the basic fundamentals of programming and managing database servers.

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Information AND Communication technology Course Completion Requirement
For credit toward degree requirements, all ICT courses must have been completed during the five school years preceding conference of the degree or must have the approval of the Associate Dean of Career, Technical, and Health Education Programs or Program Coordinator.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
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<tr>
<td>Spring Semester</td>
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<tr>
<td>BOC.114</td>
<td>Microcomputer Database App 1</td>
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<tr>
<td>ICT.205</td>
<td>Visual Basic Programming</td>
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<td>ICT.131</td>
<td>Fundamentals of Programming</td>
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<td>ICT.214</td>
<td>Microcomputer Database Applications 2</td>
<td>3</td>
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<tr>
<td>ICT.226</td>
<td>Sql Database Application</td>
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<td>Total Semester Hours</td>
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</table>

Carrie Hawkinson
Associate Dean of Career, Technical, and Health Education

Suvineetha Herath
Instructor, Information and Communication Technology
# DENTAL HYGIENE

## Associate in Applied Science (http://sandburg.edu/Academics/Degree-Certificates/Dental%20Hygiene)

The Dental Hygiene program prepares the student to work as a dental hygienist under the supervision of a licensed dentist in dental offices and other health agencies. Dental hygienists remove soft and hard deposits from teeth, teach patients how to practice good oral hygiene, and provide other preventative dental care, such as cleaning and polishing teeth, taking radiographs and applying fluoride treatments. The dental hygienist also serves as an oral health educator in the clinical and community setting. Dental hygienists should work well with others and must have good manual dexterity to use dental instruments within a patient’s mouth, with little room for error.

### Working Conditions

Flexible scheduling is a distinctive feature of this job. Full-time, part-time, evening, and weekend schedules are widely available. Hygienists are frequently hired to work only two or three days a week, so hygienists may hold jobs in more than one dental office. Dental hygienists work in offices that are clean and well lit, and they must follow important health safeguards including wearing safety glasses, masks and gloves to protect themselves from blood-borne pathogens and infectious diseases.

### Employment

Employment of dental hygienists is expected to grow much faster than the average for all occupations through 2020. According to the U.S. Bureau of Labor Statistics, median hourly salary of dental hygienists was $35.05 in 2016. Earnings vary by geographic location, employment setting, and years of experience. Source: www.bls.gov/ooh/healthcare/dental-hygienists.htm

### Accreditation/Licensure

The Dental Hygiene program has been approved by the Illinois Community College Board and the Illinois Board of Higher Education. The program in dental hygiene is accredited by the American Dental Association Commission on Dental Accreditation and has been granted the accreditation status of "approval without reporting requirements". The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653, or at 211 E. Chicago Avenue, Chicago, IL 60611. Graduates from the Dental Hygiene program will be eligible to take the National Dental Hygiene Board Examination, the respective clinical dental hygiene board examination, and the examination for registration as a dental hygienist in the respective state.

### Admission to the Program: Limited

Admission to limited enrollment programs is competitive and selection is based on candidates’ overall academic performance. All prospective students for the Dental Hygiene program must submit all admission materials and meet admission requirements before their applications will be considered for review. Applicants who are denied admission to a program and wish to apply for a subsequent academic year must repeat the application process in its entirety. As a result, no application files are carried over from prior years which allows the evaluation process to begin anew October 1 of each year. The most qualified applicants who are residents of the Carl Sandburg College district or who are residents of a community college district participating in a cooperative agreement with Carl Sandburg College will be given preference for admission to the program.

### Department of Nursing and health professions

Galesburg, IL 61401
Phone: 309.345.5299

### For Additional Information Contact:

The Welcome Center
Phone: 309.341.5299
welcomecenter@sandburg.edu

### For Graduation Requirements:

See the graduation policies and procedures (p. 30) page for details.

## Associate in Applied Science

Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements including coursework and pre-requisites prior to applying.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tr>
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<td></td>
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<tr>
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<tr>
<td>Fall Semester</td>
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<tr>
<td>DHG.109</td>
<td>Preclinic Laboratory</td>
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<td>DHG.110</td>
<td>Fundamentals of Dental Hygiene</td>
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<tr>
<td>DHG.112</td>
<td>Dental Radiology</td>
<td>3</td>
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<tr>
<td>DHG.113</td>
<td>Preventive Dentistry</td>
<td>2</td>
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<tr>
<td>DHG.114</td>
<td>Head/Neck &amp; Oral Anatomy</td>
<td>3</td>
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<tr>
<td>DHG.115</td>
<td>Dental Hygiene Practice 1</td>
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<td>BIO.211</td>
<td>Anatomy &amp; Physiology 1</td>
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<td>DHG.118</td>
<td>Oral Histology &amp; Embryology</td>
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<td>DHG.119</td>
<td>Periodontology 1</td>
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<td>DHG.120</td>
<td>Dental Hygiene 2</td>
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<td>DHG.125</td>
<td>Dental Hygiene Practice 2</td>
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<td>BIO.212</td>
<td>Anatomy &amp; Physiology 2</td>
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<td>SOC.101</td>
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<td>ENG.101</td>
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<td>Summer Session</td>
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<td>DHG.205</td>
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<td>BIO.200</td>
<td>General Microbiology</td>
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<td>Pre-Summer Session</td>
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<td>DHG.200</td>
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<tr>
<td>Second Year</td>
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<tr>
<td>Fall Semester</td>
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<td>DHG.210</td>
<td>Dental Hygiene 4</td>
<td>2</td>
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<td>DHG.211</td>
<td>Community Dental Health</td>
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<tr>
<td>DHG.212</td>
<td>Pathology</td>
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<td>DHG.213</td>
<td>Pharmacology</td>
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<td>DHG.215</td>
<td>Dental Hygiene Practice 4</td>
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<td>NUT.100</td>
<td>Introduction to Nutrition</td>
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<td>DHG.217</td>
<td>Clinical Applications Pain/Anxiety Ctrl</td>
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<td>DHG.218</td>
<td>Dental Office Management &amp; Jurisprudence</td>
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DHG.219  Periodontology 2  2
DHG.220  Dental Hygiene 5  2
DHG.225  Dental Hygiene Practice 5  5
SPE.120  Introduction to Public Speaking  3
PSY.101  Introduction to Psychology  3

Total Semester Hours  78.5

Courses must be completed with a grade of "C" or better by the end of the scheduled semester. In order to graduate, each student must complete all required courses with a grade of "C" or better.

**Carla J. Eagen**  
Instructor, Dental Hygiene

**Stacy J. Kosier**  
Assistant Professor, Dental Hygiene  
Coordinator, Dental Hygiene Program

**Kristina Gray**  
Interim Dean of the College of Nursing and Health Professions

The Dental Hygiene program is located in the Annex in downtown Galesburg. This facility contains the faculty offices, general classroom space, a simulation lab, and the dental hygiene clinic. The dental hygiene clinic contains fifteen patient operatories and six radiology suites that contain analog radiography, digital radiography, and/or panoramic technology.
EMERGENCY MEDICAL SERVICES-PARAMEDIC

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/EMS-Paramedic)

The Emergency Medical Services (EMS) – Paramedic program offers two paramedic training options, a certificate or a two-year Associate in Applied Science degree, both designed to prepare individuals to become an entry-level paramedic in the State of Illinois. The EMS – Paramedic program at Carl Sandburg College is designed to prepare the graduate to administer emergency care to the critically ill or injured in pre-hospital settings, as well as inside emergency departments.

Working Conditions
Paramedics work all shifts ranging 12-24 hours per shift, weekends, and holidays. Their work is physically strenuous and can be stressful, sometimes involving life-or-death situations. The Paramedic provides direct patient care and must be able to obtain the necessary knowledge (cognitive function), skills (psychomotor function), and demonstrate professionalism (affective function). Please refer to the Essential Skills & Abilities of a Paramedic to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
Graduates gain employment primarily with ambulance services, fire departments, helicopter flight crews and hospitals. It is projected employment of emergency medical technicians (EMTs) and paramedics will grow 24 percent from 2014 to 2024, much faster than the average for all occupations. Emergencies, such as acute illness, car crashes, natural disasters, and acts of violence, will continue to create demand for EMTs and paramedics. U.S. Department of Labor, Bureau of Labor Statistics.

Accreditation/Approval
The Carl Sandburg College Paramedic program has been issued a Letter of Review by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP Executive Office). This letter is NOT a CAAHEP accreditation status, it is a status signifying that a program seeking initial accreditation has demonstrated sufficient compliance with the accreditation Standards through the Letter of Review Self Study Report (LSSR) and other documentation. Letter of Review is recognized by the National Registry of Emergency Medical Technicians (NREMT) for eligibility to take the NREMT's Paramedic credentialing examination(s). However, it is NOT a guarantee of eventual accreditation.

To contact CoAEMSP Executive Office:
8301 Lakeview Parkway Suite 111#312
Rowlett, TX 75088
214#703#8445
FAX 214#703#8992
www.coaemsp.org

Carl Sandburg College is accredited by the North Central Association of Colleges and Schools.

Higher Learning Commission
30 LaSalle Street, Suite 2400, Chicago, IL 60602-2504

Licensure
Graduates will be eligible to take the Illinois Department of Public Health (IDPH) Paramedic licensure exam and/or the NREMT exam.

Admission to the Program: Selective
The Paramedic Program has limited enrollment and a selection process for admission into the program. Applicants need to refer to the Eligibility & Admission Requirements for this program to determine eligibility criteria and selection process. The online application deadline date for the Paramedic Program is June 30 for Fall enrollment and December 1 for Spring enrollment.

Please note applicants who do not hold a current EMT license need to apply by December 1 for Spring enrollment into EMS 101- EMT course. Upon successful completion of the EMS 101 course and EMT state examination the student will progress into paramedic courses in the Fall or Spring. Applicants who have a current EMT license need to apply by June 30 for Fall enrollment or December 1 for Spring enrollment. We notify applicants approximately two weeks after the application deadline date whether or not they have been accepted into the program. Applicants accepted into the Paramedic program must attend the required program orientation session.

Students accepted will be required to possess Healthcare Provider CPR certification throughout the program, show proof of immunizations and required titers, TB test, physical examination, criminal background check, and drug screen. Students are responsible for all fees incurred, in addition to tuition. Please refer to the EMS-Paramedic Program Cost Sheet. Please note findings on the criminal background check and drug screen may void conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Associate in Applied Science

Note: Students must apply for admission to this program. Please refer to the program's page for admission requirements, http://sandburg.edu/Academics/Degree-Certificates/EMS-Paramedic/index.html

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS.101</td>
<td>Emergency Medical Technician</td>
<td>8</td>
</tr>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
<td>3</td>
</tr>
<tr>
<td>PSY.101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHL.103</td>
<td>Biomedical Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>
### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO.211</td>
<td>Anatomy &amp; Physiology 1</td>
<td>4</td>
</tr>
<tr>
<td>EMS.112</td>
<td>Paramedic Pharmacology</td>
<td>2.5</td>
</tr>
<tr>
<td>EMS.120</td>
<td>Paramedic I</td>
<td>7</td>
</tr>
<tr>
<td>EMS.125</td>
<td>Paramedic Practice 1</td>
<td>2.5</td>
</tr>
<tr>
<td>EMS.131</td>
<td>Paramedic II Medical</td>
<td>4</td>
</tr>
</tbody>
</table>

### Second Year

#### Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO.212</td>
<td>Anatomy &amp; Physiology 2</td>
<td>4</td>
</tr>
<tr>
<td>EMS.135</td>
<td>Paramedic Practice II</td>
<td>4</td>
</tr>
<tr>
<td>EMS.131</td>
<td>Paramedic II Medical</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Summer Session

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS.210</td>
<td>Paramedic III</td>
<td>3</td>
</tr>
<tr>
<td>EMS.220</td>
<td>Paramedic Field Internship</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Semester Hours: 61

Note: Students enrolled in the Emergency Medical Services-Paramedic program must complete all EMS courses with a grade of C or better in order to register for subsequent courses and continue in the program. In order to graduate students must complete all EMS courses with a grade of C or better.

(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

### Certificate

**Note:** Students must apply for admission to this program. Please refer to the program's page for admission requirements, [http://sandburg.edu/Academics/Degree-Certificates/EMS-Paramedic/index.html](http://sandburg.edu/Academics/Degree-Certificates/EMS-Paramedic/index.html)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS.101</td>
<td>Emergency Medical Technician</td>
<td>8</td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMS.112</td>
<td>Paramedic Pharmacology</td>
<td>2.5</td>
</tr>
<tr>
<td>EMS.120</td>
<td>Paramedic I</td>
<td>7</td>
</tr>
<tr>
<td>EMS.125</td>
<td>Paramedic Practice 1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

| Second Year  |                           |                |
| **Spring Semester** |                     |                |
| EMS.135      | Paramedic Practice II     | 4              |
| EMS.131      | Paramedic II Medical      | 4              |
| **Summer Session** |                     |                |
| EMS.210      | Paramedic III             | 3              |
| EMS.220      | Paramedic Field Internship| 6              |

Total Semester Hours: 37

Note: Students enrolled in the Emergency Medical Services-Paramedic program must complete all EMS courses with a grade of C or better in order to register for subsequent courses and continue in the program. In order to graduate students must complete all EMS courses with a grade of C or better.

(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zachary Pedigo, NRP, BA</td>
<td>Adjunct Faculty, Program Coordinator/Instructor</td>
</tr>
<tr>
<td></td>
<td>CPR Instructor</td>
</tr>
<tr>
<td>Doug Sampson, EMT-P, TEMS</td>
<td>Adjunct Faculty, Program Instructor</td>
</tr>
<tr>
<td></td>
<td>CPR Instructor</td>
</tr>
<tr>
<td>John Shannon, EMT-P</td>
<td>Adjunct Faculty, Program Instructor</td>
</tr>
<tr>
<td>Richard Springer, EMT-P</td>
<td>Adjunct Faculty, Program Instructor</td>
</tr>
<tr>
<td>Christopher Herman, M.D.</td>
<td>Medical Director, Paramedic Program</td>
</tr>
<tr>
<td>Kristina Gray, MSN, RN</td>
<td>Interim Dean, College of Nursing &amp; Health Professions</td>
</tr>
</tbody>
</table>

The paramedic practice courses are designed for hands-on training in the Paramedic classroom, lab and practicum settings. The paramedic courses are held in the evenings at Carl Sandburg College's Galesburg campus Building H, H102 is the state-of-the-art Paramedic Skills Lab where essential skills such as IV insertion, airway management, EKGs, administering medications and performing advanced life support measures will be practiced on up-to-date equipment and simulated training manikins. Practicum experiences for the EMS-Paramedic program will be gained with community agencies and ambulance services in the Galesburg area such as: Galesburg Hospitals’ Ambulance Service, Galesburg Cottage Hospital, OSF St. Mary’s Medical Center, Kewanee Fire & Rescue, and other surrounding community’s fire & rescue agencies as needed.
INDUSTRIAL PROCESS PROFESSIONS

Basic Industrial & Manufacturing Maintenance Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Basic-Industrial-Manufacturing)

The certificate program provides generalized knowledge of electrical, welding, and manufacturing and industrial processes giving the program graduates knowledge and skill to be general maintenance workers in a variety of industrial, manufacturing, utilities, telecommunications and transportation settings.

The certificate is the first semester for the following A.A.S. degrees:
- Locomotive Electrical (p. 100)
- Rail/Off Highway Motive Power Electrical Technician (p. 116)
- Process Maintenance Technology (p. 98)

Admission to the Program: Open

Industrial Mechanical Maintenance Certificate

This certificate is designed for persons who want to prepare for initial or improved employment in the industry mechanical area. The curriculum provides for a student to learn the basic principles and skills which are necessary to industrial maintenance, such as drafting/blueprint reading, electricity, hydraulics and pneumatics, machine tool, mathematics and fundamentals of welding.

Admission to the Program: Open

Process Maintenance Technology A.A.S.

This degree program is designed for persons who want to prepare for employment as industry machinery mechanic, maintenance worker or stationary engineer and boiler operator. The curriculum provides for a student to learn the skills which are necessary to industrial maintenance and gives the student to choose the track where their aptitude lies – electricity or welding.

Admission to the Program: Open

First-Time Enrollees

1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5461

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Basic Industrial & Manufacturing Maintenance - Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>MFG.130</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td>MTL.101</td>
<td>Machine Tool Fundamentals 1</td>
<td>3</td>
</tr>
<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total Semester Hours</td>
<td>16</td>
</tr>
</tbody>
</table>

Note: Students enrolled in the Basic Industrial Manufacturing Maintenance Certificate must complete ELT, MTL, and WEL courses with a grade of C or better. In order to graduate, students must complete all ELT, MTL and WEL courses with a grade of C or better.

Industrial Mechanical Maintenance - Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT.101</td>
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<td>3</td>
</tr>
<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
<td>2</td>
</tr>
</tbody>
</table>

Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>DRF.100</td>
<td>Basic Drafting</td>
<td>2</td>
</tr>
<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
<td>3</td>
</tr>
<tr>
<td>HYD.101</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Semester Hours</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: Students enrolled in the Industrial Mechanical Maintenance Certificate must complete ELT, MTL, and WEL courses with a grade of C or better. In order to graduate, students must complete all ELT, MTL and WEL courses with a grade of C or better.

(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)
Process Maintenance Technology - Associate in Applied Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MFG.100</td>
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<tr>
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<tr>
<td>MTL.101</td>
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</tr>
<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
<td>2</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>HYD.101</td>
<td>Hydraulics and Pneumatics</td>
<td>3</td>
</tr>
<tr>
<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELT.107</td>
<td>Digital Logic &amp; Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ELT.119</td>
<td>Industrial Electronic Control</td>
<td>3</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPE.120</td>
<td>or Introduction to Public Speaking</td>
<td></td>
</tr>
<tr>
<td>PSY.101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY.107</td>
<td>or Positive Psychology</td>
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</tr>
<tr>
<td>SOC.101</td>
<td>or Introduction to Sociology</td>
<td></td>
</tr>
<tr>
<td>ICT.110</td>
<td>Computer Software Applications</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHY.110</td>
<td>Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>BUS.100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ELT.212</td>
<td>Industrial Electricity</td>
<td>3</td>
</tr>
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</table>

Select One Track to Complete:

**Welding Track**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
<td>3</td>
</tr>
<tr>
<td>WEL.162</td>
<td>Arc Welding Basics</td>
<td>3</td>
</tr>
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</table>

**Electrical Track**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT.209</td>
<td>AC/DC Drives and Servos</td>
<td>3</td>
</tr>
<tr>
<td>ELT.213</td>
<td>Process Control &amp; Instrumentation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Degree Hours 60

Christopher N. Banker  
Dean of Career and Corporate Development

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College’s industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College’s weld lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College’s industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College’s weld lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
MAGNETIC RESONANCE IMAGING (MRI)

Advanced Certificate (http://sandburg.edu/Academics/Degree-Certificates/Magnetic-Resonance-Imaging)

Magnetic Resonance Imaging (MRI) Advanced Certificate is a one-semester program that prepares radiographers to perform MRI procedures in hospitals and imaging centers.

Magnetic Resonance Imaging is a specialized imaging modality that utilizes computer technology in conjunction with magnetic fields and radio frequency signals to obtain sectional images in any body plane. MRI’s ability to distinguish differences in tissue composition has made it the modality of choice in imaging the central nervous system and a variety of soft tissue structures. The curriculum covers all subject areas listed in the A.R.R.T Content Specifications to prepare for the examination in Magnetic Resonance Imaging.

Working Conditions
MRI technologists may work in a variety of health care facilities, although most are employed in hospitals or imaging centers. Technologists typically work 40-hour weeks that may include evening, weekend or “on-call” hours dependent upon their employment setting. Please refer to the Essential Skills & Abilities of a MRI technologist to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
As the cost of equipment declines and smaller units become available, MRI and other radiologic procedures are increasingly being used in physicians’ offices and walk-in clinics, which increases the demand for technologists to operate the machinery. With the life expectancy increasing, the demands of an aging population increases the need for health care providers. It is expected that employment of Radiologic and MRI technologists will increase by about 13% from 2016-2026, faster than the average for all occupations. U.S. Department of Labor, Bureau of Labor Statistics.

Accreditation/Approval
Carl Sandburg College is accredited through the North Central Association of Colleges and Schools – The Higher Learning Commission, 30 LaSalle Street, Suite 2400, Chicago, IL. 60602-2504.

Licensure
Graduates are eligible to apply to take the American Registry of Radiologic Technologists (ARRT) Post Primary Examination in Magnetic Resonance Imaging. This certification is nationally recognized and enables the student to pursue employment throughout the United States.

Admission Requirements: Selective
The Magnetic Resonance Imaging (MRI) Program has limited enrollment and a selection process for admission into the program. Students must apply and be formally accepted into the program prior to enrolling in any Magnetic Resonance Imaging courses. Students can apply online to the Magnetic Resonance Imaging (MRI) Program June 1 - October 1. The application deadline date is October 1 for Spring enrollment. We notify applicants approximately two weeks after application deadline date whether they have been accepted or not into the program.

1. If you have never attended Carl Sandburg College, complete a general application for admission to the College - http://www.sandburg.edu/admissions/steps-enroll
2. Submit official transcripts from high school and all post-secondary educational institutions.
3. Graduate from an A. R. R. T approved radiography program with a 2.5 or higher cumulative G. P. A. on a 4.0 scale.
4. Provide evidence of active registration with the A. R. R. T or registry-eligible status.
5. Complete the online application for the Magnetic Resonance Imaging program.
6. Students admitted must attend the program orientation session.

Program admission is competitive and fulfillment of the basic requirements does not guarantee admission. Class size is limited and is determined by the number of available clinical sites within each community-college district. Participating community college districts (in addition to Carl Sandburg College) include: Black Hawk, Heartland, Illinois Central, Illinois Valley, John Wood, Lincoln Land, Parkland, Richland, Sauk Valley, Scott (IA), Southeastern (IA), and Spoon River.

RDT 255 practicum requires immunizations with titers, TB skin test, current Healthcare Provider CPR certification, drug screen, background check and physical. Students are responsible for all fees incurred. Please refer to the Computed Tomography Program Cost Sheet. Please note that findings on the criminal background check and drug screen may void the conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites. Technologists employed in MRI may seek enrollment in the online classroom-only portions of the program, if desired.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

For Additional Information Contact:
The Welcome Center
Phone:309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Advanced Certificate

Program Curriculum

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRI.250</td>
<td>MRI Physics &amp; Instrumentation</td>
<td>4</td>
</tr>
<tr>
<td>MRI.252</td>
<td>MR Imaging Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MRI.255</td>
<td>MRI Practicum</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

NOTE: In order to graduate, each student must complete all required courses with a grade of “C” or better.

NOTE: RDT.262, MRI.250 and MRI.252 are online courses.

Jackie D. Whipple, RT(R)
Program Coordinator/Assistant Professor, Radio logic Technology

Heidi Van Nest, RT(R), MRI
Adjunct Faculty, Magnetic Resonant Imaging

Kristina Gray, MSN RN
Interim Dean, College of Nursing & Health Professions
MEDICAL ASSISTING

Certificate [http://www.sandburg.edu/Academics/Degree-Certificates/Medical-Assisting](http://www.sandburg.edu/Academics/Degree-Certificates/Medical-Assisting)

The Medical Assistant Program is a one-year certificate that prepares students to perform administrative, clinical, and laboratory duties in a variety of health care settings. As one of the fastest growing health care occupations, medical assistants are most commonly employed in medical offices and clinics.

Their administrative responsibilities may include front office reception, billing, bookkeeping, basic correspondence, and scheduling of appointments. Clinical duties include taking medical histories, recording vital signs, collecting laboratory specimens, performing basic laboratory tests, taking electrocardiograms, and assisting the physician during the examination and treatment of patients.

**Working Conditions**
Medical assistants work closely with physicians, nurses, and other health care professionals and office personnel. Although most medical assistants work a regular 40-hour week, they may be assigned evenings or weekends dependent upon their place of employment. The medical assistant provides direct patient care and must be able to obtain the knowledge (cognitive function), skills (psychomotor function), and demonstrate professionalism (affective function).

If you are considering this field, you should be able to accurately record and keep track of information, maintain confidentiality, deal calmly and professionally with patients, follow medical charts and understand diagnoses, and work with electronic health records. Please refer to the Essential Skills & Abilities of a Medical Assistant to determine if you are able to meet these functions with or without reasonable accommodations.

**Employment**
Employment of medical assistants is projected to grow 24% over the next ten years, much faster than the average for all healthcare professions. Bureau of Labor Statistics, U.S. Department of Labor.

**Accreditation/Approval**
Carl Sandburg College is accredited by the North Central Association of Colleges and Schools – Higher Learning Commission, 30 LaSalle Street, Suite 2400, Chicago, IL 60602-2504.

**Licensure**
Upon successful completion of the program, the graduate will be eligible to take the certification exam offered by the American Medical Technologists (AMT).

**Program REQUIREMENTS**
Students will be required to show proof of immunizations and required titers, TB test, physical examination, criminal background check, and drug screen. Students are responsible for all fees incurred, in addition to tuition. Please refer to the Medical Assistant Program Cost Sheet. Please note findings on the criminal background check and drug screen may void conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites.

**College of Nursing & Health Professions**
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

**For Additional Information Contact:**
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

**For Graduation Requirements:**
See the graduation policies and procedures (p. 30) page for details.

<table>
<thead>
<tr>
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**SPRING START**

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MDA 220  Medical Assistant Externship  4

Total Semester Hours  34

NOTE: Students enrolled in the Medical Assisting program must complete all MDA and BIO courses with a grade of "C" or better in order to be eligible to register for subsequent courses. In order to graduate, students must complete all required courses with a grade of "C" or better.

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</table>

Cindy Koepp, MSN, RN  
Coordinator, Medical Assisting Program  
Instructor, Medical Assisting and Nursing

Kristina Gray, MSN, RN  
Interim Dean, College of Nursing & Health Professions

The Medical Assistant Program offers courses on the Galesburg Campus. Labs take place in the College of Nursing Building with access to the skills lab and health assessment lab where essential skills will be demonstrated and practiced. Practicum experiences for the Medical Assistant program will be gained with physician offices and clinics in the Galesburg area such as: Galesburg Cottage Hospital, Galesburg Cottage Physician Offices, OSF St. Mary's Medical Center and Clinics, and other surrounding community agencies as needed.
MEDICAL OFFICE PROFESSIONS

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Medical-Office-Professional)

Medical Office Assistants perform routine clerical and organizational tasks. They organize files, draft messages, schedule appointments, and support other staff. Carl Sandburg College offers a certificate program designed to prepare students with the skills needed for medical office work, including electronic health records, document processing, medical terminology, customer service, and communication skills.

This certificate is stackable, meaning the Medical Office Professional AAS can be completed in just two additional semesters.

Associate in Applied Science (p. 105)

Medical office professionals perform office managerial tasks. They work with electronic health records software to schedule appointments, submit claims to insurance, and bill patients. They also utilize customer service, communication, and computer skills to work with customers and potentially oversee other staff. Carl Sandburg College offers an associate's degree program designed to build on the medical office assistant certificate. Courses in medical coding; insurance and billing; anatomy and physiology; biomedical ethics; and diversity are completed during the remaining two semesters.

Working Conditions: Most medical office assistants work in comfortable office settings. Virtual assistants typically work from a home office.

Employment: Graduates are qualified for office positions in a clinic or hospital, for positions as assistants in a medical office or medical billing/ insurance assistants.

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Medical Office Assistant Certificate

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<td>BOC.106</td>
<td>Business Records Management</td>
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Medical Office Professional - AAS

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PHL.103  Biomedical Ethics  3
SOC.203  Introduction to Diversity  3
AOP.234  Insurance & Billing in Medical Office  3
AOP.291  Professional Internship 1  3
or AOP.292  or Professional Internship 2

Total Semester Hours  61

Carrie A Hawkinson
Associate Professor, Administrative Office Professional/ Business Occupations
Associate Dean of Career, Technical, and Health Education
MORTUARY SCIENCE

Associate in Applied Science Degree and Accelerated Program

Carl Sandburg College offers both a traditional and an accelerated associate degree program for students interested in a career in mortuary science.

Mortuary Science Associate in Applied Science Degree and Mortuary Science Accelerated Option -- Carl Sandburg College offers both a traditional and an accelerated associate degree program for students interested in a career in mortuary science.

Mortuary Science Program Aims and Objectives – prepares students to serve within the funeral service profession, adheres to the institutional commitment to student success in both human development and achievement of educational goals. This challenge is met by educating students in all phases of funeral service, with special attention being given to the high ethical standards within the funeral service profession. These goals are accomplished through a wide variety of educational experiences aimed at developing the many skills needed in order to successfully serve within the funeral service profession. This curriculum is based upon the American Board of Funeral Service Education curriculum outlines. Several of the mortuary science classes require some outside work as well as research about various aspects of the funeral service profession especially the responsibilities of the funeral service profession to both the families and the communities that each will serve. Upon completion of the mortuary science program, each graduate will have attained those skills necessary to uphold and foster the dignity of the funeral service profession.

Nature of the Work
Funeral directors arrange the details and handle the logistics of funerals. They interview the family to learn what they desire with regard to the nature of the funeral, the clergy members or other persons who will officiate and the final disposition of the remains. Sometimes the deceased leave detailed instructions for their own funerals. Together with family members, funeral directors establish the location, dates and times of wakes, memorial services and burials. Funeral directors also prepare obituary notices and have them placed in newspapers, arrange for pallbearers and clergy, schedule the opening and closing of a grave with the cemetery, decorate and prepare the sites of all services and provide transportation for the remains, mourners and flowers between sites. Most funeral directors are also trained and licensed embalmers. Embalming is the cosmetic and preservative process through which the body is prepared for interment.

Employment Opportunities
Opportunities are excellent with many openings in the funeral service profession. These include, but are not limited to; funeral directors, embalmers, grief facilitators, and pre-need sales. Most funeral homes are family-run businesses, and the funeral directors either are owner operators or employees of the operation.

Admission Requirements
The Mortuary Science program has specific admission requirements and a separate application process. Students who have successfully completed all of the prerequisite courses contained within the mortuary science program course of study are eligible for the accelerated option. Students must apply and be accepted into the program in order to enroll. Completed applications may be submitted beginning Oct. 1 every year for classes that start the next academic year. Admission to the program is on a rolling basis, but new students are only admitted for the fall semester each year. Mortuary science admission requirements are:

1. Meet admission requirements of Sandburg
2. Complete all general education courses
3. Complete an application for the mortuary science program
4. Submit all transcripts (H.S., College or GED) to Sandburg
5. Submit proof of interview with a licensed funeral director
6. The Hepatitis B Vaccination is required prior to admission

Enrollment in the program is limited to a specific number of students due to accreditation requirements. The accelerated program is designed to meet the needs of those applicants who have already attained the necessary educational requirements in order to complete the required Mortuary Science major courses in a two-semester sequence. Students who enroll in the program must earn a minimum grade of "C" (2.0 on a 4.0 scale) in all courses required in the mortuary science program. Failure to attain these grade requirements will result in dismissal from the program with an option to reapply to the program only available on a onetime basis.

Additional Requirements
Students are expected to purchase required clothing or protective equipment used in the program. Additional living and incidental expenses should be expected by the student.

Department of Career, Technical & Health Education
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For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Associate in Applied Science

Note: Students must apply for admission to this program. Please refer to the program's page for admission requirements, http://sandburg.edu/Academics/Degree-Certificates/Mortuary-Science/index.html

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<td>BIO.111 Anatomy &amp; Physiology Fundamentals</td>
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<tr>
<td>MTS.130 Introduction to Microbiology - Mort Sci</td>
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<td>MTS.131 Introduction to Pathology - Mort Sci</td>
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MTS.210  Funeral Service Counseling  4
BUS.201  Management Fundamentals  3
BLA.202  Business Law  3
ACC.100  Procedural Accounting  3

Second Year

Fall Semester
MTS.140  Embalming 1  4
MTS.160  Funeral Service Administration  5
MTS.170  Restorative Art  4
MTS.215  Introduction-Mass Fatalities Incidents  2
MTS.225  Thanatochemistry  3

Spring Semester
MTS.220  Funeral Directing (First 8-Week Session)  4
MTS.230  Embalming 2 (First 8-Week Session)  4
MTS.240  Funeral Service Seminar (First 8-Week Session)  1
MTS.250  Funeral Service Practicum (Second 8-Week Session)  3
MTS.260  Restorative Arts/Embalming Practicum (Second 8-Week Session)  3
MTS.270  Exam Review Seminar (Second 8-Week Session)  1

Total Semester Hours  70

NOTE: Students enrolled in the Mortuary Science program must complete all MTS courses with a grade of "C" or better in order to be eligible to register for subsequent courses. In order to graduate, students must complete all required courses with a grade of "C" or better.

Optional Accelerated Program of Study for Mortuary Science

Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements, [http://sandburg.edu/Academics/Degree-Certificates/Mortuary-Science-Accelerated/index.html](http://sandburg.edu/Academics/Degree-Certificates/Mortuary-Science-Accelerated/index.html)

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<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>First Year</td>
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<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
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<tr>
<td>MTS.150</td>
<td>Psychology of Grief &amp; Death</td>
<td>3</td>
</tr>
<tr>
<td>MTS.110</td>
<td>History of Mortuary Science</td>
<td>3</td>
</tr>
<tr>
<td>MTS.120</td>
<td>Mortuary Law</td>
<td>3</td>
</tr>
<tr>
<td>MTS.140</td>
<td>Embalming 1</td>
<td>4</td>
</tr>
<tr>
<td>MTS.160</td>
<td>Funeral Service Administration</td>
<td>5</td>
</tr>
<tr>
<td>MTS.170</td>
<td>Restorative Art</td>
<td>4</td>
</tr>
<tr>
<td>MTS.215</td>
<td>Introduction-Mass Fatalities Incidents</td>
<td>2</td>
</tr>
<tr>
<td>MTS.225</td>
<td>Thanatochemistry</td>
<td>3</td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
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<tr>
<td>MTS.130</td>
<td>Introduction to Microbiology - Mort Sci (First 8-Week Session)</td>
<td>2</td>
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<tr>
<td>MTS.131</td>
<td>Introduction to Pathology-Mortuary Sci (First 8-Week Session)</td>
<td>2</td>
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<tr>
<td>MTS.210</td>
<td>Funeral Service Counseling (First 8-Week Session)</td>
<td>4</td>
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<td>MTS.220</td>
<td>Funeral Directing (First 8-Week Session)</td>
<td>4</td>
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<td>MTS.230</td>
<td>Embalming 2 (First 8-Week Session)</td>
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<tr>
<td>MTS.240</td>
<td>Funeral Service Seminar (First 8-Week Session)</td>
<td>1</td>
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<tr>
<td>MTS.250</td>
<td>Funeral Service Practicum (Second 8-Week Session)</td>
<td>3</td>
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<tr>
<td>MTS.260</td>
<td>Restorative Arts/Embalming Practicum (Second 8-Week Session)</td>
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<tr>
<td>MTS.270</td>
<td>Exam Review Seminar (Second 8-Week Session)</td>
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<td><strong>Total Semester Hours</strong></td>
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</table>

NOTE: Students enrolled in the Mortuary Science program must complete all MTS courses with a grade of "C" or better in order to be eligible to register for subsequent courses. In order to graduate, students must complete all required courses with a grade of "C" or better.

Matthew R. Kendall
Assistant Professor, Mortuary Science

Timothy J. Krause
Professor, Mortuary Science
Coordinator of Mortuary Science

Kristina Gray
Interim Dean of Nursing & Health Professions

All of our Mortuary Science courses are taught in newly constructed, state-of-the-art facilities located on the Main Campus in Galesburg. This facility includes two main classrooms, restorative art laboratory, chapel area, arrangement and merchandising areas, fully operational preparation room for embalming and dissection, student lounge areas and offices for the teaching and support staff.

The Mortuary Science program at Carl Sandburg College is accredited by the: American Board of Funeral Service Education (ABFSE) 922 Mantua Pike, Suite 108, Woodbury Heights, NJ 08097 Phone: 816-233-3747 www.abfse.org (http://www.abfse.org)
NETWORK SECURITY ASSOCIATE

Certificate (http://sandburg.edu/Academics/Degree-Certificates/Network-Security-Accociate)

This certificate provides students with entry-level skills for a profession in network security. Managing networks security includes preserving information confidentiality, availability, and integrity. Network security professionals are tasked with performing network risk assessment, implementing safeguards that protect data and system integrity, implementing and maintaining system authentication systems and perimeter protection systems. This program prepares graduates to become employed as network security technicians, network firewall technicians, VPN administrators and remote security communication support specialists. This certificate prepares students to take the CompTIA Security+ certification exams.

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Information and Communication Technology Course Completion Requirement
For credit toward degree requirements, all ICT courses must have been completed during the five school years preceding conference of the degree or must have the approval of the Associate Dean of Career, Technical, and Health Education Programs or Program Coordinator.

*NOTE: Network Security Associate Certificate conferred upon successful completion of the required 44 hours contained in the first, second, and third semesters of this program.

Department of Career, Technical & Health Education
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5363

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<td>Fall Semester</td>
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<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>ICT.120</td>
<td>Computer Information Systems</td>
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<tr>
<td>ICT.160</td>
<td>Introduction to Internetworking</td>
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<tr>
<td>Spring Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC.120</td>
<td>Customer Service</td>
<td>2</td>
</tr>
<tr>
<td>ICT.135</td>
<td>Mobile Technologies</td>
<td>3</td>
</tr>
<tr>
<td>ICT.165</td>
<td>LINUX 1</td>
<td>3</td>
</tr>
<tr>
<td>ICT.183</td>
<td>Implement Ms Network Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>ICT.260</td>
<td>Introduction to Internetwork Operating S</td>
<td>3</td>
</tr>
<tr>
<td>Second Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOC.102</td>
<td>Business Communications</td>
<td>3</td>
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<tr>
<td>ICT.220</td>
<td>Digital Forensic &amp; Ethical Principle</td>
<td>3</td>
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<tr>
<td>ICT.255</td>
<td>Security + Fundamentals</td>
<td>3</td>
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<tr>
<td>ICT.261</td>
<td>Introduction to Local Area Networks</td>
<td>3</td>
</tr>
<tr>
<td>ICT.262</td>
<td>Introduction to Wide Area Networks</td>
<td>3</td>
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<tr>
<td>Total Semester Hours</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

*Note that completion of this certificate will also grant you the Computer Support Associate & Computer Technician certificates.

Carrie Hawkinson
Associate Dean of Career, Technical, and Health Education

Suvineetha Herath
Instructor, Information and Communication Technology
NURSING (R.N.)

Associate Degree - RN

Carl Sandburg College offers a two-year Associate in Applied Science Degree in Nursing. The Associate Degree Nursing program prepares the student for entry level as a Registered Nurse (RN). Successful graduates will be eligible to take the NCLEX-RN licensure examination.

Registered professional nurses work to promote health, prevent disease, and help patients recover from and cope with illness. Registered professional nurses assess, diagnose, plan, implement and evaluate care to patients; assist physicians with treatments and examinations; administer medications; and assist in convalescence and rehabilitation. Registered professional nurses also provide patient education to clients and families to help improve or maintain the optimum level of health.

Working Conditions
Most health care facilities provide a safe and comfortable working environment. Care is required around the clock, often in 8- or 12-hour shifts, weekends and holidays, and may involve on-call work. Schools, offices, and clinics offer more traditional work hours. The Registered Nurse provides direct patient care and must be able to obtain the knowledge (cognitive function), skills (psychomotor function), and demonstrate professionalism (affective function). Please refer to the Essential Skills & Abilities of a Registered Nurse to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
Employment opportunities include, but are not limited to hospitals, clinics and physician offices, long-term care/rehabilitation facilities, home health agencies, public health facilities, schools, churches, informatics, correctional facilities and insurance companies. The demand for registered professional nurses is very high and expected to increase. It is projected that employment of RNs will grow 16% from 2014 to 2024, much faster than the average for all occupations. Growth will occur for a number of reasons, including an increased emphasis on preventive care; growing rates of chronic conditions, such as diabetes and obesity; and demand for healthcare services from the baby-boom population, as they live longer and more, active lives. Bureau of Labor Statistics, U.S. Department of Labor.

Accreditation/Approval
The Associate Degree Nursing program holds full accreditation by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326. Illinois State Board of Nursing (ISBN) and Illinois Department of Financial and Professional Regulation (IDFPR) has approved the Associate Degree Nursing program.

Licensure
Graduates are eligible to take the National Council Licensing Examination (NCLEX-RN). Upon successful completion of this exam, the student is eligible to apply for Registered Nurse licensure. Graduates will need to complete a criminal background check at time of licensure application and will be evaluated by ISBN before licensure is granted or denied. Please be advised that the Illinois State Board of Nursing (ISBN) can deny nursing licensure and discipline those that are licensed. You can access all licensing and nursing scope of practice regulations at www.idfpr.com (http://www.idfpr.com).

Admission to the Program: Selective
The Associate Degree Nursing Program has limited enrollment and a selection process for admission into the program. Applicants need to refer to the Eligibility & Admission Requirements for this program to determine eligibility criteria and the selection process. Students can apply online to the Associate Degree Nursing Program October 1 - March 1. Application deadline date is March 1 for Fall enrollment. We notify applicants approximately two weeks after the application deadline date whether or not they have been accepted into the program. Applicants accepted into the nursing program must attend the program orientation sessions.

Students accepted will be required to possess Healthcare Provider CPR certification throughout the program, show proof of immunizations and required titters, TB test, physical examination, criminal background check, and a drug screen. Students are responsible for all fees incurred, in addition to tuition. Please refer to the Associate Degree Nursing Program Cost Sheet. Please note findings on the criminal background check and drug screen may void conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5299

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Associate Degree RN
Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements including coursework and prerequisites prior to applying. http://sandburg.edu/Academics/Degree-Certificates/Associate%20Degree%20Nursing%20RN/index.html

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tr>
<td>First Year</td>
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<tr>
<td>Summer Session</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
<td>3</td>
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<tr>
<td>PSY.101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Fall Semester</td>
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<td></td>
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<tr>
<td>NAD.105</td>
<td>Nursing 1</td>
<td>7</td>
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<tr>
<td>NAD.106</td>
<td>Medication Principles for Nurses</td>
<td>2</td>
</tr>
<tr>
<td>NAD.108</td>
<td>Health Assessment &amp; Clinical Reasoning</td>
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<tr>
<td>BIO.211</td>
<td>Anatomy &amp; Physiology 1</td>
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<td>Spring Semester</td>
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<td>NAD.125</td>
<td>Nursing II</td>
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<td>BIO.212</td>
<td>Anatomy &amp; Physiology 2</td>
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<td>NUT.110</td>
<td>Nutrition</td>
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</table>
LPN to RN Articulation into Nursing A.A.S.

Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements including coursework and prerequisites prior to applying http://sandburg.edu/Academics/Degree-Certificates/LPN-RN-Articulation/index.html

Prerequisite: Licensed Practical Nurse in Illinois with active license in good standing. Completion of all required courses prior to admission listed below** with a grade of "C" or better. Submission of nursing program application, meets all admission criteria, and admitted into the second year Associate Degree Nursing Program.

Course Title Semester Hours

First Year
Summer Session
NAD.180 LPN to RN Transition * 4

Fall Semester
NAD.200 Nursing 3 8
NAD.205 Community & Mental Health Nursing 3
PSY.265 Developmental Psychology 3

Spring Semester
NAD.210 Nursing IV 8
NAD.220 Professional Issues 2
PHL.103 Biomedical Ethics 3

Total Semester Hours 31

** Required prior to admission selection 1 year High School Biology or 1 semester College Biology. All of the following courses must have been completed with a grade of "C" or better prior to entering the second year of the Associate Degree Nursing Program:
- ENG 101-Freshman Composition I
- PSY 101-Introduction to Psychology
- BIO 211-Introduction to Microbiology I
- NUT 110-Nutrition
- BIO 212-Anatomy & Physiology II
- BIO 200-General Microbiology
- SOC 101-Introduction to Sociology
- NAD 106-Medication Principles for Nurses
- NAD 108-Health Assessment & Clinical Reasoning
- NAD 130-Pharmacology for Nurses

Application and dates to apply to our nursing program can be found on the College of Nursing webpage. Admission criteria into our nursing program can be found on the College of Nursing webpage: College of Nursing (http://www.sandburg.edu/academics/college-nursing)

Will Anderson, MSN, RN
Instructor, Nursing

Stacy Bainter, MSN, RN
Coordinator, Basic Nursing Assistant Program
Instructor, Nursing

Christina Stone, MSN, RN
Assistant Professor, Nursing

Emily Schaeffer, MSN, RN
Instructor, Nursing

Cindy Koepp, MSN, RN
Coordinator, Medical Assisting Program
Instructor, Medical Assisting and Nursing

Mary Guenseth, MSN, RN
Instructor, Nursing

Jan Lundeen, MS, RN, FNP-BC
Professor of Nursing

Kristina Gray, MSN, RN
Interim Dean, College of Nursing & Health Professions
Instructor, Nursing

The College of Nursing building (building AA) has two classrooms, health assessment lab, skills lab, and faculty offices. The nursing program has classroom availability in building A and a skills lab and Simulation Center in building A. All three labs are used to demonstrate and practice essential nursing skills such as basic patient care skills, assessment skills, catheter insertion, administering medications, IV insertion, airway management, etc. The skills lab, A035, provides nursing skills learning experiences, featuring medical equipment and medium fidelity adult, child, and toddler manikins. The Simulation Center is equipped with a high fidelity SimMan®, and a high fidelity Noelle Birthing Simulator with Neonate Hal. Clinical experiences for the Associate Degree Nursing program will be gained with acute care, long-term care and rehabilitative facilities, clinics and physician offices in the Galesburg area such as: Galesburg Cottage Hospital, OSF St. Mary Medical Center, OSF Clinics, Knox County Health Department, and other surrounding facilities as needed.
PRACTICAL NURSING (L.P.N.)

Certificate [http://www.sandburg.edu/Academics/Degree-Certificates/Practical-Nursing-LPN]

Carl Sandburg College offers a certificate in Practical Nursing. The Practical Nursing Program prepares the student for entry level as a Licensed Practical Nurse (LPN). As a member of the healthcare team the Licensed Practical Nurse works under the direction of physicians and registered nurses in a variety of health care settings. The LPN provides bedside care to clients, takes vital signs, prepares and administers injections, performs wound care, collects samples for testing, and administers prescribed medications as directed.

Working Conditions
Most health care facilities provide a safe and comfortable working environment. Working hours may include various shifts; including 8 or 12 hours, weekends, and holidays. Schools, offices, and clinics may offer more traditional hours. The Licensed Practical Nurse provides direct patient care and must be able to obtain the knowledge (cognitive function), skills (psychomotor function), and demonstrate professionalism (affective function). Please refer to the Essential Skills & Abilities of LPN to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
Employment opportunities include, but are not limited to hospitals, long-term care/rehabilitation facilities, clinics and physician offices, schools, home health agencies, and dialysis centers. It is projected that employment of LPNs will grow 16% from 2014 to 2024, much faster than the average for all occupations. As the baby-boom population ages, the overall need for healthcare services is expected to increase. There will be an increased need for LPNs in residential care facilities and in home health environments to care for older patients. Bureau of Labor Statistics, U.S. Department of Labor.

Accreditation/Approval
The Practical Nursing program holds full accreditation status by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326. Illinois State Board of Nursing (ISBN) and Illinois Department of Financial and Professional Regulation (IDFPR) has approved the Practical Nursing program.

Licensure
Graduates may apply to write for the National Council Licensing Examination (NCLEX-PN). Upon successful completion of this exam, the student is eligible to apply for Practical Nurse licensure. Graduates will need to complete a criminal background check at time of licensure application and will be evaluated by ISBN before licensure is granted or denied. Please be advised that the Illinois State Board of Nursing (ISBN) can deny nursing licensure and discipline those that are licensed. You can access all licensing and nursing scope of practice regulations at www.idfpr.com (http://www.idfpr.com).

Admission to the Program: Selective
The Practical Nursing Program has limited enrollment and a selection process for admission into the program. Applicants need to refer to the Eligibility & Admission Requirements for this program to determine eligibility criteria and selection process. Students interested in this program must attend a Health Professions Informational Session prior to applying to the program. Students can apply online to the Practical Nursing Program October 1 - March 1. The application deadline date is March 1 for Fall enrollment. The applicant will be notified approximately two weeks after the application deadline date whether or not they have been accepted into the program. Applicants accepted into the Practical Nursing program must attend the program orientation session.

Students accepted will be required to possess Health Care Provider Basic Life Support CPR certification throughout the program, show proof of immunizations and required titters, TB test, physical examination, criminal background check, and drug screen. Students are responsible for all fees incurred, in addition to tuition. Please refer to the Practical Nursing Program Cost Sheet. Please note findings on the criminal background check and drug screen may void conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309-341-5299

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Certificate
Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements including coursework and prerequisites prior to applying. [http://sandburg.edu/Academics/Degree-Certificates/Practical-Nursing-LPN/index.html]

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<tr>
<td><strong>First Year</strong></td>
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<tr>
<td><strong>Summer Session</strong></td>
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<td>ENG.101</td>
<td>Freshman Composition 1</td>
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<td>PSY.101</td>
<td>Introduction to Psychology</td>
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<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>NUP.105</td>
<td>Practical Nursing I</td>
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<tr>
<td>NAD.106</td>
<td>Medication Principles for Nurses</td>
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<td>NAD.108</td>
<td>Health Assessment &amp; Clinical Reasoning</td>
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<td>BIO.111</td>
<td>Anatomy &amp; Physiology Fundamentals</td>
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<td>NUP.125</td>
<td>Practical Nursing II</td>
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<td>Nutrition</td>
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<td><strong>Second Year</strong></td>
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<tr>
<td>NUP.130</td>
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<tr>
<td>Total Semester Hours</td>
<td></td>
<td>45</td>
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</table>
* NUP courses and all BIO courses must be completed with a grade of "C" or better by the end of the scheduled semester in order to progress in the program. Each student must complete all required courses with a grade of "C" or better to graduate.

** Notice to PN Students Who Plan to Apply for Admission to LPN to RN Articulation into the 2nd Year ADN: In place of BIO.111 Anatomy & Physiology Fundamentals you may consider enrolling in BIO.211 Anatomy & Physiology 1 and BIO.212 Anatomy & Physiology 2. (BIO.211 Anatomy & Physiology 1 and BIO.212 Anatomy & Physiology 2 are required for the Associate Degree Program.)

*** LPN’s are eligible to enter Second Year Fall Semester of the Associate Degree Nursing Program after completion of NAD.180 and all BIO courses(BIO.211, BIO.212, BIO.200) with a grade of "C" or better and Admission in to the Associate Degree Nursing Program.

Will Anderson, MSN, RN
Instructor, Nursing

Stacy Bainter, MSN, RN
Coordinator, Basic Nursing Assistant Program
Instructor, Nursing

Christina Stone, MSN, RN
Assistant Professor, Nursing

Emily Schaeffer, MSN, RN
Instructor, Nursing

Cindy Koepp, MSN, RN
Coordinator, Medical Assisting Program
Instructor, Medical Assisting and Nursing

Mary Guenseth, MSN, RN
Instructor, Nursing

Jan Lundeen, MS, RN, FNP-BC
Professor of Nursing

Kristina Gray, MSN, RN
Interim Dean, College of Nursing & Health Professions
Instructor, Nursing

The College of Nursing building (building AA) has two classrooms, health assessment lab, skills lab, and faculty offices. The nursing program has classroom availability in building A and a skills lab and Simulation Center in building A. All three labs are used to demonstrate and practice essential nursing skills such as basic patient care skills, assessment skills, catheter insertion, administering medications, IV insertion, airway management, etc. The skills lab, A035, provides nursing skills learning experiences, featuring medical equipment and medium fidelity adult, child, and toddler manikins. The Simulation Center is equipped with a high fidelity SimMan©, and a high fidelity Noelle Birthing Simulator with Neonate Hal. Clinical experiences for the Associate Degree Nursing program will be gained with acute care, long-term care and rehabilitative facilities, clinics and physician offices in the Galesburg area such as: Galesburg Cottage Hospital, OSF St. Mary Medical Center, OSF Clinics, Knox County Health Department, and other surrounding facilities as needed.
Radiologic Technology

Radiologic Technology program is a two-year Associate in Applied Science degree that prepares students to perform diagnostic x-ray examinations for patients in hospitals, imaging centers, physicians’ offices and other health-related institutions. The Radiologic Technologist (radiographer) is a member of the health care team who works directly with the patient and the physician who is responsible for accurately positioning patients, manipulating x-ray equipment and ensuring that a high quality diagnostic image is produced.

Radiologic Technologists use x-ray equipment to create images of organs, bones and blood vessels of the body. An x-ray image, or radiograph, is produced when a small amount of radiation passes through a body part and is recorded on film or stored electronically on a computer. They are educated in anatomy, patient positioning, radiographic techniques, equipment protocols, radiation safety, radiation protection and basic patient care.

Working Conditions
Radiologic Technologists may work in a variety of health care facilities, although most are employed in hospitals or major medical centers. Technologists typically work 40-hour weeks that may include evening, weekend, or “on-call” hours dependent upon their employment setting. The Radiologic Technologist provides direct patient care and must be able to obtain the knowledge (cognitive function), skills (psychomotor function), and demonstrate professionalism (affective function). Physical stamina is important in diagnostic imaging because technologists are on their feet for long periods of time and may be required to lift or turn disabled patients. Please refer to the Essential Skills & Abilities of a Radiologic Technologist to determine if you are able to meet these functions with or without reasonable accommodations.

Employment
With the life expectancy increasing, the demands of an aging population increases the need for health care providers. Employment of Radiologic technologists is expected to increase by about 13% from 2016-2026, faster than the average for all occupations. U.S. Department of Labor, Bureau of Labor Statistics.

Accreditation/Approval
Carl Sandburg College is accredited through the North Central Association of Colleges and Schools – The Higher Learning Commission, 30 LaSalle Street, Suite 2400, Chicago, IL. 60602-2504.

Licensure
Graduates are eligible to apply to take the American Registry of Radiologic Technologists A.R.R.T examination for certification in Radiography-RT(R). This certification is nationally recognized and enables the student to pursue employment throughout the United States.

Admission to the Program: Selective
The Radiologic Technology program has limited enrollment and a selection process for admission into the program. Students must apply and be formally accepted into the program prior to enrolling in any Radiologic Technology courses. Applicants need to refer to the Eligibility & Admission Requirements for this program to determine eligibility criteria and selection process. Students can apply online to the Radiologic Technology program October 1 - February 15. Online application deadline date is February 15 for Summer enrollment. We notify applicants approximately two weeks after the application deadline date whether or not they have been accepted into the program.

Applicants accepted into the Radiologic Technology program must attend the program orientation session.

Program admission is competitive and fulfillment of the basic requirements does not guarantee admission. Class size is limited and is determined by the number of available clinical sites within each community-college district. Participating community college districts (in addition to Carl Sandburg College) include: Black Hawk and Spoon River. Applicants accepted into the program must attend the program orientation session.

Students accepted will be required to possess Healthcare Provider CPR certification throughout the program, show proof of immunizations and required titers, TB test, physical examination, criminal background check, and drug screen. Students are responsible for all fees incurred, in addition to tuition. Please refer to the Radiologic Technology Program Cost Sheet. Please note findings on the criminal background check and drug screen may void conditional admission and prevent entrance to the program. Findings on the physical examination and drug screen may prevent placement at the clinical sites.

College of Nursing & Health Professions
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401

For Additional Information Contact:
The Welcome Center
Phone: 309-345-3500
welcomecenter@sandburg.edu

For Graduation Requirements:
For the graduate requirements see the graduation policies and procedures (p. 30) page for details.

Associate in Applied Science (http://sandburg.edu/Academics/Degree-Certificates/Radiologic%20Technology)

Note: Students must apply for admission to this program. Please refer to the program’s page for admission requirements including coursework and prerequisites prior to applying.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer Session</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALH.105 Introduction to Patient Care</td>
<td>1.5</td>
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<tr>
<td>RDT.100 Introduction to Radiologic Technology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RDT.101 Radiologic Technology Procedures 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG.101 Freshman Composition 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RDT.110 Rad Tech Physics &amp; Instrumentation 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>RDT.111 Radiologic Technology Procedures 2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>RDT.115 Radiologic Technology Practicum 1</td>
<td>3.5</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>RDT.120 Rad Tech Physics and Instrumentation 2</td>
<td>3</td>
<td></td>
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<tr>
<td>RDT.121 Radiologic Technology Procedures 3</td>
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<td>RDT.123 Principles of Radiologic Technology</td>
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<td>RDT.125 Radiologic Technology Practicum 2</td>
<td>3.5</td>
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<td>SOC.203 Introduction to Diversity</td>
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<table>
<thead>
<tr>
<th>Course</th>
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### Second Year
#### Summer Session

<table>
<thead>
<tr>
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<th>Credits</th>
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<tbody>
<tr>
<td>RDT.201</td>
<td>Radiologic Technology Procedures 4</td>
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<tr>
<td>RDT.205</td>
<td>Radiologic Technology Practicum 3</td>
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#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>RDT.211</td>
<td>Advanced Radiologic Technology Procedure</td>
<td>3</td>
</tr>
<tr>
<td>RDT.212</td>
<td>Radiologic Technology Image Critique</td>
<td>3</td>
</tr>
<tr>
<td>RDT.215</td>
<td>Radiologic Technology Practicum 4</td>
<td>5</td>
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<tr>
<td>PHL.103</td>
<td>Biomedical Ethics</td>
<td>3</td>
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#### Spring Semester

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>RDT.220</td>
<td>Radiologic Technology Capstone</td>
<td>3</td>
</tr>
<tr>
<td>RDT.222</td>
<td>Radiation Biology</td>
<td>2</td>
</tr>
<tr>
<td>RDT.225</td>
<td>Radiologic Technology Practicum 5</td>
<td>5</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>or SPE.120</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Semester Hours**: 72

NOTE: Students enrolled in the Radiologic Technology program must complete all RDT and BIO courses with a grade of "C" or better in order to register for subsequent courses. In order to graduate, each student must complete all required courses with a grade of "C" or better.

**Jackie D. Whipple RT(R)**  
Program Coordinator/Assistant Professor, Radiologic Technology

**Jenna Hawkes, RT(R)**  
Adjunct Faculty, Radiologic Technology

**Kristina Gray, MSN, RN**  
Interim Dean, College of Nursing & Health Professions

The Radiology Technology program is located in Building C on the Carl Sandburg College Galesburg campus. The program has general classroom space with a radiology technology lab environment for hands-on practice of radiographic techniques, x-ray equipment usage, radiation safety and protection, etc. to prepare the student for their practicum experiences. Practicum experiences for the Radiology Technology program will be gained with hospitals and medical clinics in the Galesburg and surrounding areas such as: Galesburg Cottage Hospital, OSF St. Mary's Medical Center, Graham Hospital, OSF Holy Family Medical Center, Hammond Henry Hospital, and OSF St. Luke Medical Center.
RAIL/OFF HIGHWAY MOTIVE POWER ELECTRICAL TECHNICIAN

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Rail-Off-Highway-Motive-Power-Electrical-Technician)

This program provides generalized knowledge of electrical technology for locomotives and off-highway motive powered technologies. Through demonstrations and applications of standard industry techniques and processes that are included / embedded in the program curriculum students will be able to assess, troubleshoot, fix and maintain the electrical components in these technologies. Content includes operation and analysis of industrial electronic circuits and devices as well as principles of automatic process control, measurement, programmable controller and distributed control.

Graduates will assemble and install electrical circuitry, perform troubleshooting to locate electrical problems in a variety of electrical instruments, control systems and equipment, plan preventive maintenance and repairs on electrical systems. Develop work plans and design standard operating procedures. Monitor breakdowns in electrical components using testing devices and equipment. Design wiring structures as per the electrical system or instrument need. Maintain and document records of electrical needs and study blueprints of electrical designs while solving electrical issues.

Employment
The current employment projections from the Bureau of Labor Statistics (BLS) and the Illinois Department of Employment Security (IDES) show the following for the district, rail transportation workers (53-4000) IDES reports a 6.45% increase and for rail transportation workers, all other (53-4099), IDES reports a 16.67% increases by the year 2018. For Electrical/Electronic Equipment Mechanics/Installers (49-2000) the IDES indicates a .74% growth by 2018 in the district and 3.84% growth in Illinois by 2020. However, Helpers for Electricians (47-3013) shows better growth by 2020. The BLS indicates a growth of 3% nationally by 2020. However, Helpers for Electricians (47-3013) shows better growth by 2020. However, Helpers for Electricians (47-3013) shows better growth by 2020.

Admission to the Program: Open First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5461
For Additional Information Contact: The Welcome Center

Phone: 309.345.3500
welcomecenter@sandburg.edu (admissions@sandburg.edu)

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MTL.101</td>
<td>Machine Tool Fundamentals 1</td>
<td>3</td>
</tr>
<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
<td>2</td>
</tr>
<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>MFG.130</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td>ELT.104</td>
<td>Industrial Electrical Control</td>
<td>3</td>
</tr>
<tr>
<td>ELT.121</td>
<td>Rail/Off Hiway Motive Power Electrical</td>
<td>4</td>
</tr>
<tr>
<td>ENG.101</td>
<td>Freshman Composition 1 or RDG.120 or Strategies for Success in College</td>
<td>3</td>
</tr>
<tr>
<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
</tr>
<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td><strong>32</strong></td>
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</tr>
</tbody>
</table>

Note: Students enrolled in the Rail Off/Highway Motive Power Electrical Technician program must complete all ELT courses with a grade of C or better in order to register for subsequent courses and continue in the program. In order to graduate, each student must complete ELT, MTL and WEL courses with a grade of C or better.

(Students who do not expect to complete their degree within five years should refer to the Graduation Requirements section in this catalog.)

Christopher N. Banker
Dean of Career & Corporate Development

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College’s industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College’s weld lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
SMALL BUSINESS MANAGEMENT

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Small-Business-Management)

The Small Business Management certificate is designed for students wishing to start their own business in an entrepreneurial environment or for students who are interested in managing a small business in a variety of business sectors, including wholesale, manufacturing, health care, food service, and governmental agencies. This certificate will provide students with an introduction to business organization and operations. It will also provide students with the knowledge and insight necessary to develop strong management skills, which are often necessary for advancement to supervisory positions in a small business. Students pursuing this certificate are permitted six semester hours of directed electives. This level of flexibility will allow students to select courses specific to their individual strengths, interests, and goals.

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Social & Business Sciences
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5254

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td></td>
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<tr>
<td>Summer Session</td>
<td></td>
<td></td>
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<tr>
<td>BOC.100</td>
<td>Business Mathematics</td>
<td>3</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
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</tr>
<tr>
<td>Fall Semester</td>
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<td></td>
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<tr>
<td>ACC.101</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BLA.202</td>
<td>Business Law</td>
<td>3</td>
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<tr>
<td>BUS.100</td>
<td>Introduction to Business</td>
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<tr>
<td>BUS.111</td>
<td>Small Business Principles</td>
<td>3</td>
</tr>
<tr>
<td>ICT.110</td>
<td>Computer Software Applications</td>
<td>3</td>
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Spring Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
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<tbody>
<tr>
<td>ACC.102</td>
<td>Principles of Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC.203</td>
<td>Accounting Software</td>
<td>3</td>
</tr>
<tr>
<td>BOC.120</td>
<td>Customer Service</td>
<td>2</td>
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<tr>
<td>BUS.201</td>
<td>Management Fundamentals</td>
<td>3</td>
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<tr>
<td>Directed Electives</td>
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<tr>
<td>Total Semester Hours</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

* Students who do not satisfy the course prerequisites for ICT.110 Computer Software Applications will be required to enroll in preparatory coursework.

Directed Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>BUS.291</td>
<td>Professional Internship 1</td>
<td>3</td>
</tr>
<tr>
<td>BUS.292</td>
<td>Professional Internship 2</td>
<td>3</td>
</tr>
<tr>
<td>BUS.101</td>
<td>Marketing Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>BOC.107</td>
<td>Tech Skills for Business Environment</td>
<td>3</td>
</tr>
<tr>
<td>ENG.120</td>
<td>Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>BUS.212</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Students are strongly encouraged to meet with the Dean of Social/ Business Sciences prior to enrolling in a directed elective course.

Lara Roemer
Instructor, History/ Political Science
Associate Dean of Social and Business Sciences
Advisor, Phi Theta Kappa

Keith W. Williams
Assistant Professor, Economics/ Business Administration
Coordinator, Business Programs
SURGICAL TECHNOLOGY

Associate in Applied Science
This program is offered by Illinois Central College

Program Information
The surgical technologist, working closely with surgeons and registered nurses, functions as a member of the surgical team. Courses include the study of basic patient care practices, sterile technique, surgical anatomy, surgical procedures, working as a team, communication skills, ethical/legal aspects of safe patient care, and surgical supplies and instruments. Today's surgical technologist also must know how to assemble and troubleshoot high tech equipment and instrumentation. Students receive clinical experience in all the surgical specialties at area hospitals. Graduates are eligible to apply to take the national certification examination to become a Certified Surgical Technologist (CST).

Admission to the Program: Selective
Admission criteria has been established by Illinois Central College. Students can complete their general education courses at Carl Sandburg College. Professional courses are offered at ICC in Peoria. Five positions in this program are reserved for Carl Sandburg College students.

For Additional Program Information Contact
ICC Health Careers & Public Services Dept., William Hammer, 309.999.4633 or bhammer@icc.edu

Associate in Applied Science

Required General Education Courses at Sandburg

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO.211</td>
<td>Anatomy &amp; Physiology 1</td>
<td>4</td>
</tr>
<tr>
<td>BIO.212</td>
<td>Anatomy &amp; Physiology 2</td>
<td>4</td>
</tr>
<tr>
<td>BIO.200</td>
<td>General Microbiology</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
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<tr>
<td>MDT.100</td>
<td>Medical Terminology</td>
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<td>PSY.101</td>
<td>Introduction to Psychology</td>
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<tr>
<td>SOC.101</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>SPE.120</td>
<td>Introduction to Public Speaking</td>
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</table>

Total Semester Hours: 29

Required Program Courses at ICC

<table>
<thead>
<tr>
<th>First Year</th>
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<tbody>
<tr>
<td>Fall Semester</td>
</tr>
<tr>
<td>SURTK 120 Introduction to Surgical Technology</td>
</tr>
<tr>
<td>HLTH 110 Fundamentals of Sterile Processing</td>
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<tr>
<td>Spring Semester</td>
</tr>
<tr>
<td>SURTK 130 Pharmacology for the Surgical Technologist</td>
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<tr>
<td>HEOCC 114 Introduction to Interdisciplinary Health Care</td>
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<tr>
<td>SURTK 121 Fundamentals of Surgical Technology</td>
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<tr>
<td>Summer Session</td>
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<tr>
<td>SURTK 122 Fundamentals of Surgical Technology II</td>
</tr>
</tbody>
</table>

Second Year

| Fall Semester |
| SURTK 210 Surgical Technology III | 8 |
| Spring Semester |
| SURTK 211 Advanced Fundamentals of Surgical Technology | 7 |

Total Semester Hours: 36

Total Program Requirement: 65

NOTE: Students enrolled in the Surgical Technology program must complete all BIO and SURTK courses with a grade of "C" or better in order to remain in and graduate from the program.

* Students must meet prerequisites for BIO.200 General Microbiology, BIO.211 Anatomy & Physiology 1, & BIO.212 Anatomy & Physiology 2.
WELDING- AMERICAN WELDING SOCIETY

American Welding Society - Level 1 Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/American_Welding_Society)

The American Welding Society certificate is designed to provide students with technical skills needed to become a level 1 certified welder. The graduate will be proficient in SMAW, GMAW, FCAW, OFC, OAW, PAC, and GTAW procedures, mathematical calculations and reading blueprints. Students receive various levels of welding proficiency after successfully completing tests which measure their welding skills.

Labor Market Need for Welders, Cutters, Solderers and Brazers:
2015 Median Pay: $38,150 per year; $18.34 per hour

Employment change 2014 - 2024: 14,400 positions available

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5461

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
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<tr>
<td>Fall Semester</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
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<td>WEL.125</td>
<td>Welding Blueprints</td>
<td></td>
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<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
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<td>3</td>
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<tr>
<td>WEL.162</td>
<td>Arc Welding Basics</td>
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</tr>
<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>WEL.164</td>
<td>Arc Welding Advanced</td>
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<td>3</td>
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<tr>
<td>WEL.166</td>
<td>Gas Shielded Arc Tig</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Christopher N. Banker
Dean of Career and Corporate Development

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College's industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College's weld lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
WELDING - INDUSTRIAL WELDING TECHNOLOGY

Associate in Applied Science

The Welding program is designed to provide the graduate with skills needed to enter employment in local industry as an entry-level welding supervisor for construction firms, agricultural enterprises, and heavy machine fabrication. This certificate program is designed to provide students a hands-on welding certificate that emphasizes training and the mastery of welding techniques. The welding program emphasizes welding skill proficiency through lab activities and projects as learning activities. All the courses contain essential components required for success in the industry today such as mathematics, communication, attendance, and productivity.

Long-term Benefits:
- Increased labor pool to replace retiring workers
- Increased selection for new hires
- Overall increased quality of work force
- Overall increased quality of manufacturing in western Illinois
- Increased technical expertise of existing work force

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

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See the graduation policies and procedures (p. 30) page for details.

Associate in Applied Science

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Fall Semester</strong></td>
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</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MET.100</td>
<td>Metallurgy Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>WEL.125</td>
<td>Welding Blueprints</td>
<td>2</td>
</tr>
<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
<td>3</td>
</tr>
<tr>
<td>WEL.162</td>
<td>Arc Welding Basics</td>
<td>3</td>
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</table>

| **Second Year** |                                             |                |
| **Fall Semester** |                                        |                |
| ELT.100   | Electrical Fundamentals                    | 3              |
| MTL.103   | Manufacturing Processes                    | 2              |
| TQM.101   | Total Quality Management                   | 2              |
| WEL.168   | Gas Shielded Arc Mig                       | 3              |
| WEL.170   | Applications of GMAW & FCAW                | 3              |
| SPE.110   | Interpersonal Communication                | 3              |
|           | or SPE.120 or Introduction to Public Speaking |        |

| **Spring Semester** |                                             |                |
| PHY.110   | Applied Physics                             | 3              |
| WEL.126   | Weld Test Evaluation                        | 3              |
| WEL.149   | Automated Welding Applications              | 2              |
| WEL.172   | Welding Applications                        | 3              |
| PSY.101   | Introduction to Psychology                  | 3              |
|           | or PSY.107 or Positive Psychology           |                |
|           | or SOC.101 or Introduction to Sociology     |                |

Total Semester Hours 60

Christopher N. Banker
Dean of Career and Corporate Development

Bart Slye
Instructor, Welding

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INDUSTRIAL WELDING TECHNOLOGY-MIG OPTION/ GMAW

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Welding-MIG-Option-Gas-Metal-Arc)

This two-semester certificate is designed to provide the graduate with skills needed to enter employment in local industry with skills and knowledge that emphasizes training and the entry-level competence for MIG welding. The welding program emphasizes welding skill proficiency through lab activities and projects as learning activities. All of the courses contain essential components required for success in the industry today such as mathematics, communication, attendance, and productivity.

Long-term Benefits:
1. Increased labor pool to replace retiring workers
2. Increased selection for new hires
3. Overall increased quality of work force
4. Overall increased quality of manufacturing in western Illinois
5. Increased technical expertise of existing work force

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

Department of Career & Corporate Development
2400 Tom L. Wilson Blvd.
Galesburg, IL 61401
Phone: 309.341.5461

For Additional Information Contact:
The Welcome Center
Phone: 309.345.3500
welcomecenter@sandburg.edu

For Graduation Requirements:
See the graduation policies and procedures (p. 30) page for details.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>First Year Fall Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
</tr>
<tr>
<td>MET.100</td>
<td>Metallurgy Fundamentals</td>
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<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
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<tr>
<td>WEL.125</td>
<td>Welding Blueprints</td>
<td>2</td>
</tr>
<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
<td>3</td>
</tr>
<tr>
<td>Second Year Fall Semester</td>
<td></td>
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<tr>
<td>ELT.100</td>
<td>Electrical Fundamentals</td>
<td>3</td>
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<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
<td>2</td>
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<tr>
<td>TQM.101</td>
<td>Total Quality Management</td>
<td>2</td>
</tr>
<tr>
<td>WEL.168</td>
<td>Gas Shielded Arc Mig</td>
<td>3</td>
</tr>
<tr>
<td>WEL.170</td>
<td>Applications of GMAW &amp; FCAW</td>
<td>3</td>
</tr>
<tr>
<td>SPE.110</td>
<td>Interpersonal Communication</td>
<td>3</td>
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<tr>
<td>or SPE.120</td>
<td>Introduction to Public Speaking</td>
<td></td>
</tr>
<tr>
<td>Total Semester Hours</td>
<td>46</td>
<td></td>
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</tbody>
</table>
INDUSTRIAL WELDING TECHNOLOGY-TIG OPTION/ SMAW

Certificate (http://www.sandburg.edu/Academics/Degree-Certificates/Welding-TIG-Option-Gas-Metal-Arc)

This two-semester program is designed to provide the graduate with skills needed to enter employment in local industry as an entry-level welding supervisor for construction firms, agricultural enterprises, and heavy machine fabrication. This certificate program is designed to provide students a hands-on welding certificate that emphasizes training and the mastery of welding techniques specializing in TIG-Gas Metal Arc welding. The welding program emphasizes welding skill proficiency through lab activities and projects as learning activities. All the courses contain essential components required for success in industry today such as mathematics, communication, attendance, and productivity.

Long-term Benefits:
- Increased labor pool to replace retiring workers
- Increased selection for new hires
- Overall increased quality of work force
- Overall increased quality of manufacturing in western Illinois
- Increased technical expertise of existing work force

Admission to the Program: Open
First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

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<tbody>
<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
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<tr>
<td>WEL.162</td>
<td>Arc Welding Basics</td>
<td>3</td>
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<tr>
<td>Spring Semester</td>
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<td>MAT.102</td>
<td>Technical Mathematics 2</td>
<td>3</td>
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<tr>
<td>MFG.125</td>
<td>Industrial Blueprints</td>
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<td>MFG.130</td>
<td>Industrial Safety</td>
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<tr>
<td>WEL.164</td>
<td>Arc Welding Advanced</td>
<td>3</td>
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<td>WEL.166</td>
<td>Gas Shielded Arch Tyler</td>
<td>3</td>
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<tr>
<td>Total Semester Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Christopher N. Banker
Dean of Career and Corporate Development

Bart Slye
Instructor, Welding

The Center for Manufacturing Excellence (CME) offers classroom space, a computer lab, and houses Carl Sandburg College’s industrial programs. Students may take courses in the following subject areas: welding, Computer Numerical Control Machining (CNC), biofuels, rail, machine tool, manufacturing or electrical. The electrical lab features a host of components to aid in student learning including AC/DC trainers. In 2014, Sandburg became a designated National Academy of Railroad Sciences (NARS) training site offering courses in locomotive electrical and locomotive mechanical. Instruction is delivered by individuals with industry-specific expertise and includes specialized coursework using technical equipment. Two diesel engines inside the CME are available for training opportunities. The College’s welding lab offers 26 bay stations. The welding area offers two welding simulators, as well as state of the art multi-process welding machines. The CNC Program offers training in programming, setup, and operations while housing multiple lathe, mills, and CNC Machines as well as simulators to properly train students for a career in the machining industry.
WELDING- OXY-FUEL WELDING & CUTTING

The Oxy-Fuel Welding and Cutting Certificate Program is designed to enable the graduate to succeed in employment as a welder in industry. The graduate will be proficient in oxy-acetylene welding and cutting, arc welding and reading blueprints. Students receive various levels of welding proficiency after successfully completing tests which measure their welding skills.

Labor Market Need for Welders, Cutters, Solderers and Brazers:
2015 Median Pay: $38,150 per year; $18.34 per hour
Employment change 2014 - 2024: 14,400 positions available

Admission to the Program: Open

First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process.

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<th>Semester Hours</th>
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<td>MAT.101</td>
<td>Technical Mathematics 1</td>
<td>3</td>
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<tr>
<td>MET.100</td>
<td>Metallurgy Fundamentals</td>
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<tr>
<td>MFG.100</td>
<td>Introduction to Welding</td>
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<tr>
<td>WEL.162</td>
<td>Arc Welding Basics</td>
<td>3</td>
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<tr>
<td></td>
<td>Total Semester Hours</td>
<td>16</td>
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</tbody>
</table>

Christopher N. Banker
Dean of Career and Corporate Development

Bart Slye,
Welding Instructor

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### Certificate

The Pipe Welder Specialist Certificate program is a two-semester program designed to provide students a hands-on specialty welding certificate that emphasizes training and the mastery of welding techniques in pipe welding. Students will specialize in ARC and TIG welding and build skill proficiencies aligned with American Welding Society Level II Welder Standards.

#### Long-term Benefits:
1. Increased labor pool to replace retiring workers
2. Increased selection for new hires
3. Overall increased quality of work force
4. Overall increased quality of manufacturing in western Illinois
5. Increased technical expertise of existing work force

#### Admission to the Program: Open

#### First-Time Enrollees
1. Complete an application for admission and, if desired, apply for financial aid.
2. Send an official high school transcript or GED score report to the Admissions and Records Office.
3. Complete the placement exam.
4. Meet with an advisor/counselor to select classes and complete the registration process

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### Certificate

#### Fall Start

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<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>WEL.160</td>
<td>Oxyacetylene Welding &amp; Metal Preparation</td>
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<td>WEL.162</td>
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<td>3</td>
</tr>
<tr>
<td>WEL.164</td>
<td>Arc Welding Advanced</td>
<td>3</td>
</tr>
<tr>
<td>WEL.166</td>
<td>Gas Shielded Arc Tig</td>
<td>3</td>
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<tr>
<td>MTL.103</td>
<td>Manufacturing Processes</td>
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<tr>
<td>MAT.101</td>
<td>Technical Mathematics 1</td>
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#### Spring Semester

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<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>WEL.168</td>
<td>Gas Shielded Arc Mig</td>
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<tr>
<td>WEL.151</td>
<td>Introduction to Pipe Welding 1G Rolled</td>
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<tr>
<td>WEL.152</td>
<td>Pipe Welding 2G Horizontal</td>
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<tr>
<td>WEL.153</td>
<td>Pipe Welding 5G Vertical</td>
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<tr>
<td>WEL.154</td>
<td>Pipe Welding 6G Inclined</td>
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<td>WEL.125</td>
<td>Welding Blueprints</td>
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<td>MFG.130</td>
<td>Industrial Safety</td>
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<tr>
<td>ENG.101</td>
<td>Freshman Composition 1</td>
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</tbody>
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Total Semester Hours: 33

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Christopher N. Banker  
Dean of Career and Corporate Development

Bart Slye  
Instructor, Welding

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COURSE DESCRIPTIONS

• ACC Accounting Courses (http://catalog.sandburg.edu/coursedescriptions/acc)
• AGR Agriculture Courses (p. 126)
• ALH Health Careers Courses (p. 127)
• AOP Administrative Office Professional Courses (p. 129)
• ARB Arabic Courses (p. 131)
• ART Art Courses (p. 132)
• AUT Automotive Technology Courses (p. 136)
• BFM Courses (p. 138)
• BIO Biology Courses (p. 139)
• BLA Business Law Courses (p. 141)
• BOC Business Occupations Courses (p. 142)
• BUS Business Administration Courses (p. 144)
• CHD Child Development Courses (p. 146)
• CHM Chemistry Courses (p. 148)
• CHN Courses (p. 149)
• CRM Criminal Justice Courses (p. 150)
• DHG Dental Hygiene Courses (p. 152)
• DRF Courses (p. 156)
• ECO Economics Courses (p. 157)
• EDU Education Courses (p. 158)
• ELT Electricity Courses (p. 159)
• EMS Emergency Medical Services Courses (p. 162)
• ENG English Courses (p. 165)
• ESC Earth Science Courses (p. 168)
• FRE French Courses (p. 169)
• GEO Geography Courses (p. 170)
• GER German Courses (p. 171)
• HIS History Courses (p. 172)
• HTH Health Courses (p. 174)
• HYD Hydraulics Courses (p. 175)
• ICT Information and Communication Technology Courses (p. 176)
• INS International Studies Courses (p. 181)
• ISP Independent Studies Courses (p. 182)
• KIN Kinesiology Exercise Courses (p. 183)
• MAT Mathematics Courses (p. 186)
• MDA Medical Assisting Courses (p. 190)
• MDC Medical Coding Courses (p. 193)
• MDT Medical Terminology Courses (p. 194)
• MET Metallurgy Courses (p. 195)
• MFG Manufacturing Courses (p. 196)
• MLT Medical Lab Technician Courses (p. 197)
• MRI Magnetic Resonance Imaging Courses (p. 198)
• MTL Machine Tool Courses (p. 199)
• MTS Mortuary Science Courses (p. 202)
• MUS Music Courses (p. 205)
• NAD Nursing Associate Degree Courses (p. 207)
• NUA Nursing Assistant Courses (p. 211)
• NUP Nursing - Practical Courses (p. 212)
• NUT Nutrition Courses (p. 214)
• OMS Organizational Management Courses (p. 215)
• OSP Occupational Special Problems Courses (p. 216)
• PCT Patient Care TechPHL Courses (http://catalog.sandburg.edu/coursedescriptions/pct)
• PHL Courses (p. 217)
• PHY Physics Courses (p. 218)
• POR Portuguese Courses (p. 219)
• POS Political Science Courses (p. 220)
• PSY Psychology Courses (p. 221)
• RDG Reading Courses (p. 223)
• RDT Radiologic Technology Courses (p. 224)
• RRT Rail Operations Courses (p. 228)
• SOC Sociology Courses (p. 230)
• SPE Speech Courses (p. 232)
• SPN Spanish Courses (p. 233)
• SSC Social Science Courses (p. 234)
• THE Theatre Courses (p. 235)
• TQM Total Quality Management Courses (p. 236)
• WEL Welding Courses (p. 237)
AGR AGRICULTURE

Courses

**AGR.111 Intro to Agriculture Mechanization**  
3 2 4

The major topics considered in this course include agricultural power and machinery, agricultural electrification and application, agricultural structures, and soil and water conservation. Offered: Fall and Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only Non Course

**AGR.121 Introduction to Animal Science**  
3 2 4

This course includes the following major topics regarding animal science: introduction and history; breeds of beef, dairy, horses, and other companion animals, poultry, sheep and swine; breeding and selection; anatomy and physiology; nutrition; growth; environment; health and sanitation; product; marketing; and production, technology and economics. The laboratory portion of this course utilizes field trip experiences. Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable
*****PLEASE NOTE: THIS COURSE IS CONTINGENT ON UNIVERSITY OF ILLINOIS OFFERINGS*****.
General Education – Not Applicable Elective Only

**AGR.131 Introduction to Crop Science**  
3 2 4

This course focuses upon four principle objectives: the importance of crops on world food production, the basic principles of plant growth and the influence of man and environment, the theoretical and practical application of agronomic principles, and the interpretation of scientific data. Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable
*****PLEASE NOTE: THIS COURSE IS CONTINGENT ON UNIVERSITY OF ILLINOIS OFFERINGS*****.
General Education – Not Applicable Elective Only

**AGR.141 Introduction to Agri Economics**  
3 3

This course provides an introduction to economic principles and the application of those principles to agriculture. The role of agriculture in the United States and the world economics also is included. Offered: Fall and Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable
*****PLEASE NOTE: THIS COURSE IS CONTINGENT ON UNIVERSITY OF ILLINOIS OFFERINGS*****.
General Education – Not Applicable Elective Only Non Course

**AGR.151 Introductory Soil Science**  
3 2 4

The principle topics considered in this course are: the basic and applied chemical, physical and biological concepts in soils; the origin, classification and distribution of soils and their relationship to people and food production; and the management and conservation of soils. The laboratory portion of this course will utilize a combination of college laboratory and field trip experiences. Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable
*****PLEASE NOTE: THIS COURSE IS CONTINGENT ON UNIVERSITY OF ILLINOIS OFFERINGS*****.
General Education – Not Applicable Elective Only

**AGR.181 Introduction to Horticultural Science**  
2 2 3

This course is an introduction to the principles and practices involved in the development, production, and use of horticulture crops (fruits, vegetables, greenhouse, turf, nursery, floral and landscape). The course will also show the importance of horticulture in providing food and plant ornamentation; plant structure, growth and development; and environmental and biological factors influencing plant growth. Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable.
General Education-not applicable, elective only. *****PLEASE NOTE: THIS COURSE IS CONTINGENT ON UNIVERSITY OF ILLINOIS OFFERINGS*****.
General Education – Not Applicable Elective Only
ALH HEALTH CAREERS

Courses

**ALH.100 Exploring Health Careers**  
1 1
This course is designed to introduce the student who is new to health care or exploring a health career field to basic knowledge and skills for many different health careers. This is an introductory course exploring aspects of infection control, vital signs, patient movement/transport, and patient care in different health career fields. This course is intended for any student interested in a health care field.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**ALH.105 Introduction to Patient Care**  
1 1 1.5
This course is designed to introduce the student who is new to health care or exploring a health career field to basic knowledge and skills of patient care for many different health careers. This is an introductory course exploring aspects of infection control, vital signs, patient movement; transport, oxygen administration, recognition of medical emergencies and assisting with drug administration. This course is intended for any student interested in a health care field.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**ALH.110 Introduction to Pharmacology**  
3 3
This course is an overview of pharmacology and its medications as it pertains to allied health professions. Topics will include principles of drug administration and basic mathematics involved in drug calculations. Throughout the course, the commonly used medications within allied health professions will be explored. This course is intended for students intending to enter an Allied Health program.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**ALH.115 Basic Health Statistics** 3 3
This course is designed to provide students an introduction to terms, definitions, formulae, and computations used in computing health care statistics. Emphasis is on inpatient health care data and statistical computations, but most applications can be transferred to the outpatient or alternative healthcare settings. Statistical skills will be acquired and developed through actual use and analysis of data.

Offered: Fall
Prerequisites: The appropriate placement exam score or take MAT.080 with a grade of C or better or one year of high school Algebra completed in the last three years with a minimum grade of C.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ALH.120 Medical Law and Ethics** 3 3
Students will be introduced to legal, moral, and ethical issues that are likely to arise as they practice health information management. This course provides an overview of the laws and the ethics needed to provide competent and compassionate care to patients within legal and ethical boundaries. This course will serve as a guide to assist students in resolving legal and ethical questions encountered as a health care provider.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AGS, AAS and Certificates where applicable.
General Education – Not Applicable

**ALH.130 Professionalism in Healthcare** 2 2
The purpose of this course is to build a professional foundation for those who are entering college-level health care programs or for those who may be interested in pursuing a career in health care. This course will provide topics essential for today’s learner and tomorrow’s health care professional. Students will learn about the health care system, personal traits of the health care professional, relationships, teamwork, and communication in the health care setting, cultural competence and patient care, and the business of caring. The student will gain cognitive (knowledge), psychomotor (skills) and affective (behaviors) of the following fundamental concepts in health care: communication; cultural diversity; personal and professional traits of a health care worker; infection control; critical thinking; healthcare technology; ethical and legal responsibilities; and safety in healthcare. The student should develop and strengthen the professional traits and behaviors needed for today’s health care industry. The student will have the basic knowledge of occupations in health care as it pertains to therapeutic, diagnostic, environmental, and information systems of the health care industry. This course is composed of 32 theory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable
General Education: Not Applicable
This course provides career development for health professionals focusing on how to achieve and maintain career success to assist students in finding the right jobs. This course will introduce the student to professionalism in healthcare to gain an understanding of the personal traits of health care professionals in their role, work ethic and performance, the practicum experience, employment and professional development. The student will learn about working in health care and making a commitment to the job, maintaining a professional image, building professional references, creating a resume, creating a professional portfolio, interviewing, and developing leadership skills. This course is composed of 32 theory hours.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable

General Education – Not Applicable

ALH.155 Principles of Electrocardiography

This course provides the student with an introductory overview of the anatomy and physiology of the heart and explores the normal electrical conduction as well as common variations as evidenced by changes in the waveform on the cardiac monitoring device. The course will also focus on the student’s ability to interpret the resting normal and abnormal ECG and the student’s ability to properly, perform 3-lead and 12-lead cardiac monitoring. Students will practice with equipment including introduction to the function and proper use of the ECG machine and proper lead placement utilizing simulation and hands-on practice in lab. This course is composed of 12 theory hours and 8 lab hours.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable IAI Course No.: General Education – Not Applicable

ALH.160 Advanced Electrocardiography

This course provides the student with advanced ECG interpretation and allows a greater understanding for diagnostic and treatment purposes. The course will also focus on the student’s ability to interpret ECG dysrhythmias, characteristics, causes, and treatments including pacemakers and interpreting ECGs. Comprehensive dysrhythmias review and medication review. This course is composed of 32 hours of theory.

General Education – Not Applicable

ALH.180 Ecg Technician Practicum

This course provides students with opportunities to observe, participate, and perform in the functional role of the ECG Technician in a clinical setting and simulated clinical setting. Students supervised by course instructor or preceptors in a variety of healthcare facilities. The student will participate as a member of the healthcare team. The student will demonstrate safe and effective ECG testing procedures and ability to interpret ECG dysrhythmias that require immediate intervention in a clinical setting. The student will demonstrate professionalism, communication techniques, patient teaching, documentation, confidentiality, infection control practices, and compassionate patient care. The student will complete weekly exam review modules to prepare for the certification examination. This course is composed of 8 exam review/theory hours and 80-120 hours of lab/clinical practicum.

General Education – Not Applicable
AOP ADMINISTRATIVE OFFICE PROFESSIONAL

Courses

AOP.100 Careers for Office Professional

This course is an exploration of office careers. Office professionals in areas such as: medical, legal, government, education, manufacturing, and financial services will present synopses of career opportunities. Students will be required to participate in seminars and to discuss and report on the information presented. It is recommended that students take this course during the first semester of an office program.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.101 Keyboarding & Formatting 1

This is the first course for individuals who have had no significant prior instruction in keyboarding. Instruction emphasizes the concepts and techniques involved in mastering the computer keyboard, various letter styles, reports, and tables. Minimum five-minute timing speed on straight copy material of 30 gross words per minute (with five errors or less) is required to successfully complete the course.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.102 Keyboarding & Formatting 2

This is the second semester course in keyboarding. The concepts and techniques presented in AOP 101 will be strengthened with more attention on special letters, forms, tables, and reports. Speed and accuracy development will be stressed. Minimum five-minute timing speed on straight-copy material of 45 gross words per minute (with five errors or less) is required to successfully complete the course. Students also enrolled in AOP 116 are expected to maintain concurrent enrollment to ensure success in this course.
Offered: Spring
Prerequisites: AOP.101 with a minimum grade of C and concurrent enrollment in AOP.116. Medical Office Assistant, and Legal Office Assistant majors are exempt from the AOP.116 prerequisite.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.107 Website Creation

This course teaches the essentials of one of the most powerful tools for building Web sites without HTML. Students will learn the principles of site design and navigational structures, and how to manipulate text, graphics, and buttons. Students will also discover how to organize their pages professionally with tables, how to choose a Web Presence Provider, how to publish their site on the Web, and how to attract visitors to their site. This course will utilize software such as Microsoft FrontPage.
Offered: Fall or as Needed
Prerequisites: ICT.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.116 Introduction to Word Processing

This course introduces students to creating, formatting, customizing, proofing, editing, maintaining, managing, and printing documents. Additional topics include merging documents, sorting text, selecting records, inserting elements, and creating and enhancing tables and charts.
Offered: Fall or Spring or Summer
Prerequisites: AOP.101 with a minimum grade of C.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.130 Electronic Health Records

This course introduces students to electronic health records used in different health care settings and will develop student skills in utilizing software to record medical records in an electronic format. Topics covered include converting paper records to electronic format, using electronic health records in a hospital and a medical office, how electronic medical health records interact with other hospital information systems, and the challenges to privacy and security including HIPAA.
Students will complete hands-on exercises working with electronic medical records software.
Offered: Fall
Prerequisites: Take MDT.100 previously or be enrolled concurrently
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.201 Business English

This course provides a comprehensive coverage of effective business communications. In addition, it is designed to review grammar, punctuation, capitalization, number usage, abbreviation styles, and spelling.
Offered: Spring
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
AOP.203 Office Procedures

This course introduces a variety of topics and practices intended to promote personal and professional development. Topics covered include professional ethics, theories of leadership, telework, and an overview of job search techniques. Communication techniques will be applied to the process of making effective presentations, providing proper customer service, and communicating effectively using telecommunications. Strong written and oral communication skills will be emphasized. Students will also gain insight into stress, anger and time-management techniques.

Offered: Fall
Prerequisites: AOP.101 with C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.216 Advanced Word Processing

This course explores advanced features and builds on skills introduced in AOP.116. Topics covered include enhancing, customizing, and organizing document content. Additional advanced features covered pertain to document references, forms, outlines, macros, and document protection.

Offered: Fall or Spring or Summer
Prerequisites: AOP.101 and AOP.102 with grade of C or better or AOP.116.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.231 Advanced Electronic Health Records

This course is an extension of Electronic Health Records, AOP.130. Further application of skills and knowledge will be implemented with the use of actual electronic health record experiences. Case studies using industry-standard software in a variety of simulated medical environments will prepare students to transform theoretical electronic health record concepts into practical usage.

Offered: Spring
Prerequisites: AOP.130 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

AOP.234 Insurance & Billing in Medical Office

This course introduces students to the basic information used in medical insurance and patient billing procedures. Topics covered include insurance terminology, government insurance programs, billing practices and computer software used for billing in a hospital or medical office.

Offered: Spring
Prerequisites: AOP.101
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

AOP.291 Professional Internship 1

Students who are currently employed will perform a research project on a topic of interest to the student and his/her firm. The project will be supervised by the supervising instructor and a job site supervisor.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

AOP.292 Professional Internship 2

The objective of this course is to integrate classroom theory with business practice. All students will receive on-the-job training with selected area businesses in the public and private sectors. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions. The prerequisite for this course is courses applicable toward the chosen curriculum and permission of supervising instructor, program coordinator or Dean of Career Technical and Health Education programs.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
ARB ARABIC

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**Courses**

**ARB.110 Arabic I**

This is the first of a two-course sequence of elementary Arabic. The emphasis of the course is on acquiring conversational skills through practical use of the language.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AGS, AAS and Certificates where applicable.

General Education – Not Applicable Elective Only

**ARB.111 Arabic II**

This is the second of a two-course sequence of elementary Arabic. The emphasis of the course is on acquiring conversational skills through practical use of the language.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AGS, AAS, and Certificates where applicable.

General Education: Not Applicable-Elective Only.

General Education – Not Applicable
ART ART

Courses

**ART.111 Art Appreciation**

This course leads students to develop knowledge for experiencing and understanding visual art as an important aspect of culture. Students will be introduced to the nature and purposes of art, principles of visual perception and design, art media and techniques, and a survey of the major art forms produced by ancient, Western and non-Western cultures. This course is intended for non-art majors, but may also be a useful introduction for anyone who has no previous experience in art.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Fine Arts Human Relations

**ART.112 Art: Prehistoric to 1400**

This course is an historical survey of world art, including the prehistoric period, ancient and non-Western civilizations, through the Middle Ages in Europe. The course focuses on the study of architecture, sculpture, painting and other appropriate artforms to lead the student to an understanding of art, processes of cultural and artistic development, and the influence of those developments on the culture in which we live. This is an essential foundation course for students intending to pursue a baccalaureate degree in art. It is also beneficial for students intending to pursue baccalaureate degrees in the humanities or social sciences.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Fine Arts

**ART.113 Art: 1400 to Present Day**

This course is an historical survey of the art of Western Civilization from the early Renaissance to present-day. The course focuses on the study of architecture, sculpture, painting and other appropriate art forms to lead the student to an understanding of art, processes of cultural and artistic development, and the influence of those developments on the culture in which we live. This is an essential foundation course for students intending to pursue a baccalaureate degree in art. It is also beneficial for students intending to pursue baccalaureate degrees in the humanities or social sciences. This course is intended as the second part of a two-part course sequence, preceded by ART 112, and students will benefit most from it if completed in that sequence. There are, however, no prerequisites for this course.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Fine Arts Human Relations

**ART.121 Two Dimensional Design**

This course is an introduction to basic visual design theory and practice. Emphasis is on the development of concepts and skills essential to visual thinking and expression through studio project assignments. This is an essential foundation course for students intending to pursue a curriculum in art, but is open to all students who have an interest in visual design, regardless of prior experience. Studio safety will be emphasized.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**ART.122 Three Dimensional Design**

This course introduces principles and media appropriate to the design and production of three-dimensional art forms. Emphasis is on the development of concepts and skills essential to visual thinking and expression through studio project assignments. There are no prerequisites, but art majors are advised to complete ART 121 and/or ART 131 before this course, in order to enhance transferability as a baccalaureate art degree requirement. Studio safety will be emphasized.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**ART.131 Drawing 1**

This course is an introduction to basic drawing media, techniques and purposes. Emphasis is on the development of concepts and skills essential to visual thinking and expression, through studio exercises. This is an essential foundation course for students intending to pursue further studies in art, but it is open to all students who have an interest in developing drawing skills regardless of prior experience. Studio safety will be emphasized.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**ART.132 Drawing 2**

This course is intended to be an extension of ART 131, and emphasizes the development of advanced drawing techniques, pictorial composition, and personal expressiveness. It is recommended as part of a two-course foundation in drawing for students intending to transfer to senior institution in art. Studio safety will be emphasized.

Offered: Fall or Spring or Summer

Prerequisites: ART.131 or equivalent

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
**ART.133 Life Drawing**  
1.5 3 3  
This course is an introduction to drawing the human figure using a variety of media. Drawings will be derived from direct observation and instruction will emphasize descriptive drawing techniques of the human figure. Drawing activities will emphasize full figure, features, and anatomical differentiation encompassing individual physiognomy. Studio safety will be emphasized. 
Offered: Spring  
Prerequisites: ART.131  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**ART.141 Painting**  
1.5 3 3  
Initially, this course focuses upon the basic principles of art as expressed through painting. Subsequently, the student selects subjects for further development of his/her competence in the implementation of those principles. There are no prerequisites, but art majors are advised to complete ART 131 before this course in order to enhance transferability as a baccalaureate art degree requirement. Studio safety will be emphasized.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**ART.142 Advanced Painting**  
1.5 3 3  
This course continues building aesthetic and technical skills begun in ART 141. Emphasis will be placed on the investigation of media usage, color development and painting as a medium of communication. Studio safety will be emphasized.  
Offered: Fall or Spring  
Prerequisites: ART.141  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**ART.151 Printmaking**  
1.5 3 3  
Printmaking techniques such as relief, intaglio, and monotype are studied and practiced in this course to give the students an understanding of the processes of making multiple originals. Attention is given to the principles of design and the use of printing media to express visual ideas. This is an expansion of Printmaking I, the students will be concentrating on a theme and work to create a body of work using the techniques acquired from Printmaking I. Studio Safety will be emphasized. Prerequisite: Printmaking I, but no other prerequisites are required. Art majors are advised to complete ART 131 before this course in order to enhance transferability as a baccalaureate art degree requirement.  
Prerequisites: Take ART.151 with a grade of C or better.  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AFA, AS, AAS, AGS, and Certificates where applicable. General Education: Not Applicable-Elective Only.  
General Education – Not Applicable

**ART.152 Printmaking II**  
1.5 3 3  
Printmaking techniques such as relief, intaglio, and monotype are studied and practiced in this course to give the students an understanding of the processes of making multiple originals. Attention is given to the principles of design and the use of printing media to express visual ideas. This is an expansion of Printmaking I, the students will be concentrating on a theme and work to create a body of work using the techniques acquired from Printmaking I. Studio Safety will be emphasized. Prerequisite: Printmaking I, but no other prerequisites are required. Art majors are advised to complete ART 131 before this course in order to enhance transferability as a baccalaureate art degree requirement.  
Prerequisites: Take ART.151 with a grade of C or better.  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AFA, AS, AAS, AGS, and Certificates where applicable. General Education: Not Applicable-Elective Only.  
General Education – Not Applicable

**ART.161 Intro to Photography**  
1.5 3 3  
This course will introduce the student to the concepts and skills of basic black-and-white photography and the elements of pictorial form, and will promote use of the medium as a vehicle for creative expression. Emphasis will be placed on the mastery of basic techniques through camera and darkroom projects, and photographic vision through the analysis of exemplary works.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AFA, AGS and Certificates where applicable. General Education: Not applicable-elective only.  
General Education – Not Applicable

**ART.162 Digital Photography**  
1.5 3 3  
This course will introduce the student to the skills and concepts of basic digital photography and promote the development of an understanding of the application of the elements and principles of design to the imaging process. It will also promote exploration of the medium for creative expression. Emphasis will be placed on the mastery of basic techniques through camera and computer projects and on photographic vision through the analysis of exemplary works.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AFA, AAS, AGS and Certificates where applicable. General Education: Not applicable-elective only.  
General Education – Not Applicable
ART.163 Digital Photography II 1.5 3 3
This course continues building aesthetic and technical skills begun in Digital Photography (ART 162). This course will introduce the student to advanced skills and concepts of digital photography and image editing, continue the development of understanding in the application of the elements and principles of design to the imaging process, and promote exploration of the medium for creative expression. Emphasis will be placed on the mastery of basic tools and techniques of image editing and enhancement through the use of Adobe Photoshop. Camera and image editing projects will provide students with opportunities for creative and technical growth.
Offered: As Needed
Prerequisites: ART.162
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ART.171 Ceramics 1 1.5 3 3
This course is an introduction to the medium of clay, from construction through the completion of finished pieces, including handbuilding techniques, glazing and firing. Studio safety will be emphasized. There are no prerequisites, but art majors are advised that some senior institutions may not accept this course as an art degree requirement unless it was preceded by specific art prerequisites.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ART.172 Ceramics 2 1.5 3 3
This course is intended as an extension of ART 171, emphasizing the further development of knowledge and skills regarding form, decorative and conceptual approaches, glaze formulation, and firing technology. The course emphasizes individual instruction, permitting students to focus on handbuilding or potter’s wheel techniques. Studio safety will be emphasized.
Offered: Fall or Spring or Summer
Prerequisites: ART.171
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ART.191 Creativity for Graphic Design 1.5 3 3
This course introduces the basic principles and elements of graphic design, the history of graphic design, form/symbol development, typography, and color theory. Students will learn through practical experience in essential studio processes and procedures, critiques, and group discussions how to visually solve graphic design problems. Using industry-standard software, students develop the ability and confidence to determine appropriate and successful designs. The course will focus on fundamental concepts and visual communication skills necessary for graphic design. The creation of multiple-page documents will be required, in both black and white and color, covering document construction, integration of word processing programs, working with images and typography, custom colors and standard output. The course will provide an introduction to the production of printed materials using illustrations and image manipulation software via computer.
Offered: Fall or Spring
Prerequisites: ART.121 or ART.122 or ART.131 or ART.132.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ART.192 Conceptual Skill-Graphic Designers 1.5 3 3
This course is a continuation of skills and creativity introduced in Graphic Design 191. Conceptual skills in visual language are used in the creation and communication of design systems. Students will create integrated media across a spectrum of applications, generate design criteria research, analysis, and design implications, and refine development for collateral items through web and motion graphics. This course will emphasize the development of graphic abstraction into both black and white and color translations, as well as the use of digital and/or traditional photography. There will be further emphasis on three- and four-dimensional computer modeling. Students will be introduced to the concepts of kinetic imagery and motion graphics. This course is an introduction to multimedia graphic design.
Offered: Fall and Spring
Prerequisites: ART.191
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
| ART.193 Computer Art | 1.5 | 3 | 3 |

This course is intended as an introduction to computer applications in the visual arts. Students take a computer software-based approach to image manipulation and generation, including the integration of computer hardware, software, and peripheral devices as tools to create and combine traditional and contemporary visual ideas as applied to art and design. This is not a graphic design computer course. This studio-based course includes appropriate instruction in the health and safety issues relative to the methods of the course and the materials being used.

Offered: Fall
Prerequisites: ART.121 or ART.131
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
AUT AUTOMOTIVE TECHNOLOGY

Courses

AUT.101 Spark Ignition Engines 1

This course is designed to introduce the student to the spark ignition engine. Emphasis will be placed on engine nomenclature, operation, rebuild procedure, and precision measuring instruments relative to the course. The student will perform a complete rebuild on a furnished engine with evaluation of the work performed on an engine dynamometer.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.103 Braking Systems

This course is designed to include all aspects of the braking system with emphasis on brake repair and diagnosis. The student will learn to operate a brake lathe. Students will also utilize computer scanners to diagnose ABS brake problems.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.105 Electrical Systems

This course is designed to cover the basic electrical systems found on late model automobiles. Electricity/electronic theory will be covered with an emphasis on DC circuits. The student will be exposed to an in-depth use of test equipment relative to diagnosis of electrical systems problems.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.107 Shop Practices 1

This course is designed to enhance student skills by repairing automobiles in a simulated dealership setting. Emphasis will be placed on student following repair practices utilized in local dealerships. Customer automobiles will be used in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.110 Auto Math

This course focuses on the math pertinent to the automotive field. Arithmetic, geometry, trigonometry, and basic algebra are the concepts that will be stressed. Lab assignments applying the aforementioned concepts will be given during this course to enhance the students’ practical skills. The metric system will also be discussed and applied throughout the course.

Offered: Fall
Prerequisites: Placement into MAT.083 or equivalent.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

AUT.124 Engine Performance Design

This course pertains to designing an engine to meet performance objectives. Analytical methods of design will be applied before parts are selected. Performance software will be utilized for design analysis.

Offered: As Needed
Prerequisites: AUT.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

AUT.201 Ignition Systems

This course is designed to include all aspects of ignition systems with emphasis on operation, repair and diagnosis. The student will utilize electronic ignition test equipment and computer scanners to diagnose and monitor late model computer controlled engines.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.202 Steering Suspension & Front Wheel Dr

This course is designed to expose student to an in-depth use of a four wheel computer controlled alignment machine. Student will inspect/repair front end components of vehicles prior to performing alignment. Shock and strut replacement will be covered along with tire repair and balancing.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable

AUT.203 Manual Transmission & Dr Trains

This course is designed to include all aspects of manual transmissions and drive trains with emphasis on repair and diagnosis. The student will be exposed to an in-depth study of gear ratios and their effects on torque and speed. Differential and transaxles will also be covered in this course.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AGS and Automotive Technology Certificate.
General Education – Not Applicable
**AUT.204 Automatic Transmissions**  
1.5 3 3  
This course is designed to include repair procedures and diagnosis of automatic transmissions and transaxles. The student will be responsible for rebuilding and testing two transmissions/transaxles. Maintenance procedures will also be covered in this course.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate - AGS and Automotive Technology Certificate.  
General Education – Not Applicable  

**AUT.206 Heating and Air Conditioning**  
1 3 2  
This course is designed to include all aspects of heating and air conditioning with emphasis on repair, diagnosis and system charging utilizing all safety precautions. The student will operate an AC reclaiming system for removing and charging the AC system.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate - AGS and Automotive Technology Certificate.  
General Education – Not Applicable  

**AUT.209 Shop Practices 2**  
6 2  
This course is designed to enhance previous skills obtained and apply those skills in a simulated dealership setting. Emphasis will be on accuracy or repair and diagnosis with a decrease in repair time. The student will be required to maintain repair orders and purchase request sheets.  
Offered: Spring  
Prerequisites: The completion of all technical courses in the automotive technology certificate.  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AGS and Certificates where applicable.  
General Education – Not Applicable  

**AUT.215 Advanced Braking & Chassis Control**  
1 4 3  
This course will cover advanced methods of diagnosing more complex systems such as anti-lock brakes, traction and stability controls, and electrical assist steering using diagnostic scan tools and electrical systems diagnostics. Admission into the Advanced Electrical Certificate is required to enroll in this course.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AGS and Certificates where applicable.  
General Education – Not Applicable  

**AUT.220 Advanced Electrical Systems**  
1 4 3  
This course involves testing and repairing non-powertrain electronic systems in vehicles. Diagnostic scantool/on-board diagnosis of vehicle networks will be performed. Hands on experience with common types of switches and sensors. Admission into the Advanced Electrical Certificate is required to enroll in this course.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AGS and Certificates where applicable.  
General Education – Not Applicable  

**AUT.225 Adv Emissions & Powertrain Control**  
2 4 4  
This course covers the theory, operation and testing of powertain and emissions control systems in non-hybrid vehicles, with emphasis on real-world hands on testing, inspection and repair. Scan tools and On-board diagnostic testing will be covered, as well as component testing of sensors and control devices. Admission into the Advanced Electrical Certificate is required to enroll in this course.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AGS and Certificates where applicable.  
General Education – Not Applicable  

**AUT.230 Automotive High Voltage Safety & System**  
1 4 3  
This course will cover safety concerns and theory of high-voltage electrical systems found in Hybrid electric HEV, and Battery Electric Vehicles, BEV. Emphasis will be on safety equipment and procedures, tools and testing equipment unique to HEV/BEV service; as well as, the theory of HEV/BEV operation including major variant types, regenerative braking and charging. Admission into the Advanced Electrical Certificate is required to enroll in this course.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable
Courses

**BFM.101 Biofuels Fundamentals**

This course is an overview of the biofuels industry. It introduces biodiesel and ethanol in relation to traditional transportation fuels, markets, and regulatory constraints. This course also includes discussion of careers in the biofuels industry, and is the first in a series of classes in the AAS Degree in Biofuels Manufacturing Technology.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**BFM.201 Ethanol Production**

This course will cover the history, rationale, and overall fundamental process and quality control of ethanol production. The course is designed to study the relationship of science, technology and management areas in ethanol processing operations. A Process Flow Demonstrator of a typical dry mill ethanol plant will be used to examine the sequence of operations seen in various stages of production. This course will explain the rationale for feedstocks used in ethanol processing as well as product and co-product production and use. Labs will provide hands-on training of ethanol production with the Ethanol Trainer equipment.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**BFM.202 Biodiesel Production**

This course will cover the history, rationale, and overall fundamental process and quality control of Biodiesel production. The course is designed to study the relationships of science, chemistry, technology, fuel standards, and management areas in Biodiesel processing operations. A Process Flow Demonstrator of a typical biodiesel plant will be used to examine the sequence of operations seen in various stages of production. This course will explain the rationale for feedstocks used in biodiesel processing. Labs will provide hands-on training of biodiesel production with the Biodiesel Trainer equipment.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**BFM.203 Water Treatment & Control**

The course covers the basic understanding of primary water treatment systems and chlorination. Students will be able to describe problems that can be caused by impurities in the water and explain how they can be removed physically and chemically. This course will also familiarize students with the basic concepts of treating industrial water during biofuels manufacturing so it can be reused or discharged into the environment.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**BFM.291 Professional Internship 1**

Students who are currently employed in the biofuels industry will perform a related research project on a topic of interest, outside the scope of normal job duties, to the student and his/her firm. The project will be supervised by the supervising instructor and a job site supervisor.

Consent of Instructor, Program Coordinator or Dean of Career Technical and Health Education is required to enroll in this course.

Offered: Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**BFM.292 Professional Internship 2**

The objective of this course is to integrate classroom theory with business practice. Students will receive on-the-job training with select industry partners. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions. Consent of Instructor, Program Coordinator or Dean of Career Technical and Health Education is required to enroll in this course.

Offered: Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
**BIO BIOLOGY**

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<thead>
<tr>
<th>Courses</th>
<th>Hr/Wk</th>
<th>Hr/Wk</th>
<th>Sem</th>
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<tbody>
<tr>
<td><strong>BIO.090 Foundation for Biology</strong></td>
<td>2</td>
<td>2</td>
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<tr>
<td>Understanding science requires the ability to speak the language, skill in the scientific measuring systems as well as knowledge of the scientific method. Foundation for Biology prepares the student for college level science courses. This class teaches the essential knowledge of scientific terminology, metric system, scientific method and basic chemistry. Offered: Fall or Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Not Applicable. General Education – Not Applicable</td>
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<tr>
<td><strong>BIO.095 Foundation for Anatomy &amp; Physiology</strong></td>
<td>2</td>
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<tr>
<td>Understanding of anatomy and physiology begins with a firm grasp of cell structure and function. Foundation for Anatomy and Physiology prepares the student for college level anatomy and physiology courses by explaining the functions of cells. This class teaches the essential knowledge of cell morphology, cell physiology, membrane transport, cell division as well as basics of tissues, organ systems and anatomical regions. Offered: Fall or Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Not Applicable. General Education – Not Applicable</td>
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<tr>
<td><strong>BIO.101 General Biology</strong></td>
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<td>2</td>
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<tr>
<td>This course introduces the student to the chemical and physical principles of life especially as they relate to humans. The major topics covered include cell structure/function, the energy flow, organismic biology, evolution, genetics, and ecology. General Biology is designed to meet the laboratory science requirement of the non-major as well as providing an appropriate background for science majors. Offered: Fall or Spring or Summer Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. L1 900L General Education – Science Lab Science</td>
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<tr>
<td><strong>BIO.102 General Zoology</strong></td>
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<tr>
<td>This course provides an introduction to the animal kingdom with topics covering embryonic development, morphology and physiology, behavior, ecology, and evolution. Included are surveys of the protozoans and the animal kingdom. Offered: Spring Prerequisites: BIO.101 or equivalent Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. L1 902L General Education – Science Lab Science</td>
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<tr>
<td><strong>BIO.103 General Botany</strong></td>
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<tr>
<td>This course provides an introduction to the plant kingdom with an emphasis on structure, basic principles of growth and development, reproductive biology, and ecology. Included will be surveys of bacteria, algae, fungi, and the plant kingdom. Offered: Spring Prerequisites: Take BIO.101 or equivalent Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. L1 901L General Education – Science Lab Science</td>
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<tr>
<td><strong>BIO.108 Ecological Principles</strong></td>
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<tr>
<td>This course introduces the student to the basic concepts of ecology and the interrelationships between organisms and their environment. The major topics covered will include natural cycles, energy flow, population ecology, communities and ecosystems, and biotic interactions. Ecological Principles is designed to provide an appropriate background for science majors but will also meet the laboratory science requirement of the non-major with an interest in science. It is also recommended to take BIO 102, BIO 103, and CHM 100. Offered: Fall Prerequisites: BIO.101 and MAT.109 with a grade of C or better. Recommended to also take BIO.102, BIO.103, and CHM.100 Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only</td>
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<tr>
<td><strong>BIO.111 Anatomy &amp; Physiology Fundamentals</strong></td>
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<td>This is a one-semester, general survey course intended primarily for LPN and mortuary science students. The course includes a systems approach to anatomy and physiology and many additional topics such as nutrition, metabolism, and fluid-electrolyte and acid-base balance. Offered: Fall or Spring or Summer Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only</td>
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### BIO.120 Environmental Science

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<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>General Education</th>
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<tbody>
<tr>
<td>BIO.120 Environmental Science</td>
<td>3</td>
<td>Science</td>
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</table>

This course is intended to provide an introduction to the study of food production, human cultures, energy and mineral use, economics, politics, and land usage from an environmental viewpoint. Studied are the major ecosystems on Earth (deserts, forests, etc.) and their individual characteristics. Also included will be current major problems such as global warming and ozone loss and the effects of all environmental problems on plant and animal species. Emphasis will be on actions that individuals and groups can do to reduce environmental degradation. The course is designed for non-majors.

**Offered:** Fall or Spring or Summer

**Prerequisites:** BIO.101 CHM.100 is recommended

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.

### BIO.200 General Microbiology

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<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>General Education</th>
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</thead>
<tbody>
<tr>
<td>BIO.200 General Microbiology</td>
<td>3</td>
<td>Science Lab Science</td>
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</tbody>
</table>

The purpose of this course is to provide a brief study of the morphology, physiology, cultural characteristics, isolation methods, classification methods and distribution of microbes as related to public health, agriculture, medicine and industry. In addition, recent advances in recombinant DNA research will be discussed. This course is appropriate for students planning to pursue a baccalaureate degree. Also, BIO 200 is a requirement for students enrolled either in the Associate Degree Nursing program or in the Dental Hygiene program.

**Offered:** Spring or Summer

**Prerequisites:** BIO.101 and CHM.100 or equivalent as evaluated by Biology faculty

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable Elective Only

### BIO.205 Human Biology

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<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>General Education</th>
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</thead>
<tbody>
<tr>
<td>BIO.205 Human Biology</td>
<td>3</td>
<td>Science Lab Science</td>
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</tbody>
</table>

This is a one-semester course in anatomy and physiology designed to meet the needs of students who need a laboratory science course for associate degree or baccalaureate programs. The course will be an integrated systems approach emphasizing principles of homeostasis. Laboratory work will include fetal pig dissection, as well as other appropriate activities. Successful completion of one year of high school Biology and one year of high school Chemistry no longer than five years prior to enrollment is strongly recommended.

**Offered:** Fall or Spring or Summer

**Prerequisites:** BIO.101 and CHM.100 with a grade of C or better or the equivalent as evaluated by Biology faculty

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable Elective Only

### BIO.211 Anatomy & Physiology 1

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<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>General Education</th>
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</thead>
<tbody>
<tr>
<td>BIO.211 Anatomy &amp; Physiology 1</td>
<td>3</td>
<td>Not Applicable Elective Only</td>
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</tbody>
</table>

This is the first of a two-course sequence in anatomy and physiology for students who are intending to pursue a baccalaureate degree. Also, Anatomy 1 & 2 are required in the Associate Degree in Nursing Program. This course will be presented as an integrated systems approach emphasizing principles of homeostasis. There will be discussion of pathophysiological and anatomical changes that occur as a result of disease.

**Offered:** Fall

**Prerequisites:** BIO.101 and CHM.100 with a grade of C or better or the equivalent as evaluated by Biology faculty

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable Elective Only

### BIO.212 Anatomy & Physiology 2

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<thead>
<tr>
<th>Course Title</th>
<th>Credit Hours</th>
<th>General Education</th>
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</thead>
<tbody>
<tr>
<td>BIO.212 Anatomy &amp; Physiology 2</td>
<td>3</td>
<td>Not Applicable Elective Only</td>
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</tbody>
</table>

This course is a continuation of BIO 211. There will be special emphasis on the cardiovascular system, fluid, electrolyte, and acid base balance; and exercise physiology. Laboratory work will include dissection of a fetal pig.

**Offered:** Spring

**Prerequisites:** BIO.211

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable Elective Only
BLA BUSINESS LAW

<table>
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<tr>
<th>Courses</th>
<th>Hr/Wk</th>
<th>Hr/Wk</th>
<th>Sem</th>
<th>Lect/</th>
<th>Clin</th>
<th>Disc</th>
<th>Lab</th>
<th>Hr</th>
</tr>
</thead>
</table>

**BLA.201 Legal Environment of Business**

This course is the study of the economic, business, political, and social values or forces which cause laws related to business activities to come into existence and change. Topics include legal history, philosophy, and judicial processes related to contracts, agencies, sales, and secured transactions.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**BLA.202 Business Law**

This course is a basic explanation of the legal rights and responsibilities of businesses in both the public and private sectors. It is relevant to future managers and integrates ethics and social responsibility, international and contemporary business issues, and e-commerce in organizations. Current legal cases and ethical dilemmas are used to illustrate and reinforce legal regulations.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
**BOC BUSINESS OCCUPATIONS**

**Courses**

**BOC.100 Business Mathematics**

This course introduces students to basic mathematical functions as applied to the business world and to banking services. In addition, the process of calculating sales discounts and markup, interest, employee compensation, and sales discounts will be covered.

Offered: Fall

Prerequisites: The appropriate placement exam score or MAT.080 with a grade of C or better.

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**BOC.104 Mathematics of Finance**

This course is a continuation of BOC 100. Students will learn how to apply basic mathematical functions to more advanced business activities. Students will utilize basic concepts of accounting for analyzing business situations. In addition, students will analyze financial statements, interest earnings, discounts, annuities, insurance and the distribution of working capital. Introductory statistical methods will also be covered.

Offered: Spring

Prerequisites: BOC.100

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**BOC.101 Business Records Management**

This course focuses on the development, management, and maintenance of a record management system. Basic storage and retrieval methods will be discussed and applied. Records retention, transfer, and disposition, according to records retention schedules, will also be presented. In addition, records and information management technology will be discussed.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**BOC.105 Business Communications**

This course covers the fundamental principles and modes of business communications. Students will be introduced to a variety of professional letters, the appropriate use of electronic mail, and the principles of oral communication. In addition, professional development topics such as resume writing and interviewing techniques will be explored.

Offered: Fall

Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better or AOP.201.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**BOC.103 Office Technology**

This course introduces students to a personal information management program, the electronic search and retrieval of information, basic office machines, and voice recognition software. In addition, an in-depth study of a personal information management system; voice recognition software; navigating, searching, and downloading files on the Internet; and using basic office machines will be included.

Offered: Spring

Prerequisites: AOP.101 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**BOC.106 Business Records Management**

This course focuses on the development, management, and maintenance of a record management system. Basic storage and retrieval methods will be discussed and applied. Records retention, transfer, and disposition, according to records retention schedules, will be presented. In addition, records and information management technology will be studied including the application of records management principles using a computer database.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable IAI Course No.: Offered: Spring or Summer or Fall or As Needed.

General Education – Not Applicable

**BOC.107 Tech Skills for Business Environment**

This course provides students with instruction in basic computer skills including keyboarding, 10-key, file management, data storage and retrieval, collaborative technology, and computer hardware and software. Basic formatting rules for letters, memos, reports and tables will be covered as well as basic word processing concepts and proofreading skills. Spreadsheet and database basic terminology and usage will also be introduced. This course is designed for students who are not majoring in an office occupations program.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
**BOC.109 Voice Recognition I**  
This course will be a basic introduction to voice recognition software. Topics to be covered will include adjusting and tuning the microphone, training voice recognition software to recognize the user’s voice, correcting speech errors in the voice recognition software, dictating and manipulating text using basic commands and formatting basic documents. Voice recognition software uses and possibilities will be explored as they relate to business, educational, and personal environments.

Offered: As Needed  
Prerequisites: BOC.107

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable

**BOC.112 Microcomputer Spreadsheet App 1**  
This course will provide students with skills necessary to develop and maintain a spreadsheet. Students need no prior knowledge of a spreadsheet application program for this course. The use of basic business mathematical formulas, functions, and statistics will be introduced. In addition, the processes for formatting and editing worksheets, managing files, creating graphs, sharing and protecting workbooks, and will be covered.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education: N/A
- IAI Course No.: Offered: Spring.
- General Education – Not Applicable

**BOC.114 Microcomputer Database App 1**  
This course is an introduction to the management of data in a database. It covers the database operations that allow a personal computer user to create and update files; order and search files; generate reports; use memory variables for more complex data manipulation; and produce input and output forms.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education: N/A
- IAI Course No.: Offered: Fall.
- General Education – Not Applicable

**BOC.120 Customer Service**  
This course introduces students to the concepts and skills needed for success in retail and business careers. Topics include listening techniques, verbal and non-verbal communication skills, and the effective use of technology. The ability to effectively interact with customers, to handle customer service issues, and to establish customer relationships and loyalty will be emphasized. Students will also be introduced to methods for effectively managing stress and conflict.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable

**BOC.201 Professional Internship 1**  
Students who are currently employed will perform a research project on a topic of interest to the student and to his/her firm. The project will be supervised by the supervising instructor and by the job site supervisor. Permission of supervising instructor, program coordinator or Dean of Career, Technical and Health Education.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable

**BOC.202 Professional Internship 2**  
The objective of this course is to integrate classroom theory with business practice. Students will receive on-the-job training with selected area businesses in the public and private sector. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions. Courses applicable toward the chosen curriculum and permission of the supervising instructor, program coordinator or Dean of Career, Technical and Health Education required.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education – Not Applicable
BUS BUSINESS ADMINISTRATION

Courses

**BUS.100 Introduction to Business**  
3 3  
This course is a comprehensive overview of business principles, practices, and trends that are influencing today's business and affecting tomorrow's competitive environment. The impact of globalization, technology, ethics, diversity, and culture, in addition to various emerging issues, is studied in application or relation to all business disciplines. This course provides a general orientation to business organizations for students who plan to pursue a bachelor's degree. Also, it is useful to individuals who desire a basic understanding of the business community for occupational or personal reasons.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**BUS.101 Marketing Fundamentals**  
3 3  
This course introduces the business activities involved in planning, pricing, promoting, and distributing want-satisfying goods and services to present and potential customers.  
Offered: Spring  
Prerequisites: BUS.100  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**BUS.102 Sales Fundamentals**  
3 3  
This course presents the basic principles underlying the sales process. The basic philosophy is to promote an understanding of the salespersons' obligation to themselves, the company, the customer, and society.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable

**BUS.108 Personal Finance**  
3 3  
This course provides the foundation and skills necessary for effective personal financial decision making. Students will gain an understanding of financial products and strategies and will develop the tools needed to analyze and evaluate alternatives. Topics covered include money management, budgeting, consumer credit, banking services, savings, investments, insurance, securities, real estate, income taxes, and estate planning.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AGS, AAS, and Certificates where applicable.  
General Education – Elective Only

**BUS.111 Small Business Principles**  
3 3  
This course provides an overview for students interested in creating and operating a small business. Basic accounting principles, organizational business structures, operational and supervisory skills, and oral and written communications will be covered in this course.  
Offered: Fall and Spring  
Applicable toward graduation at Sandburg where program structure permits: Degree or Certification: AAS, AGS, and Certificates where applicable. General Education: Not applicable.  
General Education – Not Applicable

**BUS.112 Supervision Fundamentals**  
3 3  
This course is intended for persons who desire to become supervisors and those who are currently in supervisory positions, but wish to improve their performance. It will provide a basic knowledge of the duties and responsibilities common to various types of supervisory jobs and how to avoid common mistakes of supervisors. Leadership skills will be discussed along with suggestions on the development of leadership qualities. Basic concepts of organization, management and planning as well as organizing work, directing work, and improving work methods will be studied. Evaluation of worker performance, along with teaching supervisors how to instruct workers will be covered. Some attention will be given to developing good public relations.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable

**BUS.114 Skills for Business Careers**  
1 1  
This course is designed to prepare students for entering a career in business. Topics include: business tools (spreadsheets), decision skills, employer expectations, success skills, basic business etiquette, and business professionalism. The course may include field site visits and guest speakers to provide students with the opportunity to interact with business professionals.  
Prerequisites: Spring  
Applicable toward graduation at Sandburg where program structure permits: IAI Course No. Degree or Certificate: AAS, AGS, and Certificates where applicable
BUS.201 Management Fundamentals 3 3
This course provides a basic study of the field of management for individuals preparing for initial or improved employment. Several streams of management theory are reviewed. The basic functions of the business manager (planning, organizing, leading and controlling) are considered. Management in a global business environment and current management technologies and processes are stressed.
Offered: Spring
Prerequisites: BUS.100 or equivalent background as evaluated by instructor.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

BUS.206 Principles of Finance 3 3
This course provides students the fundamentals of financial management of a firm. Principles and methods of obtaining, managing, controlling and using capital in the operation of a business are studied. Topics include Time Value of Money, financial analysis, financial institutions, cost of capital, return on investment, and short-term and long term financing.
Offered: Spring
Prerequisites: ACC.101 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, & Certificates where applicable.
General Education: N/A
IAI Course No.: Offered: Spring Prerequisite: ACC 101 with a grade of C or better.
General Education – Not Applicable

BUS.208 Marketing Promotion 3 3
Students will study the promotion and communication element of Marketing, which includes: Advertising, Public Relations, Personal Selling, and Sales Promotion.
Offered: Spring
Prerequisites: Take BUS.101.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, & Certificates where applicable General Education: N/A
Offered: Spring Prerequisite: BUS 101.
General Education – Not Applicable

BUS.212 Human Resource Management 3 3
This course focuses on recruitment and personnel planning; employment, placement, compensation, and benefits; training and development; employee and labor relations; health, safety, and security; and personnel management in the global community.
Offered: Fall
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

BUS.291 Professional Internship 1 15 3
Students who are currently employed will perform a business-related research project on a topic of interest to the student and his/her firm. The project will be supervised by the supervising instructor and a job site supervisor. Permission of the supervising instructor, program Coordinator, or Associate Dean of Social and Behavioral Science.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

BUS.292 Professional Internship 2 15 3
The objective of this course is to integrate classroom theory with business practice. Students will receive on-the-job training with selected area businesses in the public and private sectors. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions. Courses applicable toward the chosen curriculum and permission of supervising instructor, Program Coordinator or Associate Dean of Social and Behavioral Science programs. Applicable towards graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
This course introduces students to the study of child behavior through direct observation. Theory and practice of techniques for observing and recording child behavior are provided. Various guidance techniques will be introduced. Analysis of child behavior will lead to an understanding of the individual child as well as appropriate guidance techniques. Students will develop an understanding of the relationship between careful observation, analysis of behavior, communication, and effective interaction with children. Weekly participation in the campus child care is required. Prior to enrollment in any course requiring participation in the campus child care center, a student must meet all DCFS requirements, pursuant to the Illinois Child Care Act [225 ILCS 10] Reg. 923, effective 1998. An orientation of the child care center, physical exam, negative TB test, DCFS background check, and electronic fingerprinting are required prior to participation at the center.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

This course provides an overview of the health, safety and nutritional needs of young children and early childhood practices to ensure children’s well-being in group settings. Content includes roles and responsibilities of adults in meeting children’s needs; the promotion of healthy life style practices; understanding common childhood illnesses and injuries; meeting health, nutrition and safety standards; and planning nutritionally appropriate meals.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.

IAI Course No. ECE 902
General Education – Not Applicable

This course is designed to demonstrate to the student how to do authentic, alternative, classroom based assessment on young children. It will further provide the student with the knowledge and skills to interpret and use the information gained to plan curriculum that is responsive to and supportive of children’s learning and development. Students Will have the opportunity to engage in assessment processes through means of classroom observations, providing each student with a stronger understanding of child development skills. Students will take responsibility for using a variety of age, developmentally, linguistically and culturally appropriate formal and informal assessment to gather and share information on each child’s skills, abilities, interests and needs, birth through age 8.

Offered: As Needed

Prerequisites: CHD.103

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable
**CHD.204 Exceptional Children**  
This course is an overview of children with exceptional cognitive, physical, social and emotional characteristics. The curriculum includes an analysis of developmental and educational needs imposed by exceptionality. It also offers identification, and intervention strategies, methods, and programs that are designed to meet the needs, including, but not limited to, children identified as learning disabled. The course includes the historical, philosophical and legal foundations of special education, including the study of applicable federal and state laws and requirements: Individuals with Disabilities Education Act, Americans with Disabilities Act, Individualized Family Service Plan, Individualized Education Plan, and inclusive programs. The course fulfills requirements of School Code, Article 21-2a.  
Offered: As Needed  
Prerequisites: CHD.102  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
IAI Course No. ECE 913  
General Education – Not Applicable Elective Only

**CHD.207 Supervision & Administration**  
The purpose of this course is to provide students with the skills and knowledge to successfully supervise and administer a child care program. Topics include: administrative organization, personnel policies, licensing regulation, planning and evaluation.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable
CHM Chemistry

Courses

**CHM.100 Concepts of Chemistry**

This one-semester course is designed for individuals who have completed less than the equivalent of one year of chemistry. The fundamental concepts of general chemistry developed are appropriate for students interested in further study of chemistry as well as those students who have immediate needs for chemistry. Primary emphasis is placed upon matter, atomic structure, nuclear chemistry, periodicity, stoichiometry, and organic chemistry. A student may NOT count this course toward graduation at CSC if he/she has satisfactorily completed CHM.110 or an equivalent course prior to enrollment in CHM100.

Offered: Fall or Spring or Summer
Prerequisites: MAT.093 or MAT.083 or MAT.086 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Science Lab Science

**CHM.110 General Chemistry 1**

This is the first semester of two courses that constitute a year’s study of general chemistry. It is designed for the student planning to major in chemistry, engineering, mathematics, science, and related fields that require a comprehensive study of general chemistry. The principal emphasis is upon bonding, gas laws, stoichiometry, nuclear chemistry, and fundamental principles and theories. Laboratory experiments are designed to focus on analytical techniques of volumetric and gravimetric analysis.

Offered: Fall
Prerequisites: One year of high school chemistry or CHM.100 and MAT.099 or its equivalent
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Science Lab Science

**CHM.120 General Chemistry 2**

This is the second course finishing the year’s study of general chemistry. Primary emphasis is placed upon qualitative and quantitative instrumental techniques involving visible and infrared spectroscopy, and gas chromatographic analysis. Special emphasis is given to chemical thermodynamics, electrochemistry, and other selected topics as time permits.

Offered: Spring
Prerequisites: CHM.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**CHM.140 Organic and Biochemistry**

This one-semester course is designed for individuals who need an introduction to modern organic and biochemistry. The primary interest of the student may be in agriculture, nursing, home economics, or the health sciences - areas of science requiring various degrees of background in organic and biochemistry.

Offered: Spring
Prerequisites: CHM.100 or CHM.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**CHM.210 Organic Chemistry 1**

This is the first course of two which constitute a year’s study of organic chemistry. Organic Chemistry 1 is required for students planning a major in chemistry and related fields. Primary lecture emphasis is placed upon the study of organic functional groups, reaction mechanisms, nomenclature, structure, stereochemistry, and spectroscopy. The laboratory emphasizes the development of techniques to run organic reactions, to isolate and characterize the products, and the use of computational molecular modeling to gain insight into the structure and reactivity of organic molecules.

Offered: Fall
Prerequisites: CHM.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**CHM.220 Organic Chemistry 2**

This is the second course of two which constitute a year’s study of organic chemistry. The emphasis in lecture and laboratory is similar to that in Organic Chemistry 1, with the continued study of new functional groups and new reaction mechanisms. Further emphasis is placed upon biomolecules such as carbohydrates and proteins, with a bottom up approach (moving from small molecules to large ones) that contrasts with the top down approach typically used in biology and biochemistry courses.

Offered: Spring
Prerequisites: CHM.210
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
Courses

**CHN.110 Chinese I**

3 3

This is the first of a two-course sequence of elementary Chinese. The emphasis of the course is on acquiring conversational skills through practical use of the language.

General Education – Not Applicable

**CHN.111 Chinese II**

3 3

This is the second of a two-course sequence of elementary Chinese. The emphasis of the course is on acquiring conversational skills through practical use of the language.

General Education – Not Applicable
CRM CRIMINAL JUSTICE

Courses

CRM.101 Introduction to Criminal Justice

This course will constitute a survey of the entire triad of the American criminal justice system: law enforcement, judiciary, and corrections. Basic terminology and concepts, the foundation philosophy, general examination of criminal law, survey of each area of the triad and their interrelatedness, and the role of the social sciences will be emphasized. In addition, a general examination will also be made of American civil law. Offered: Fall or as Needed Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

CRM.102 Police Administration & Management

This course will examine the evolution of American policing, external influences and controls on the police, organizational theory, management styles, labor relations, and the selection process for police personnel. Offered: Fall or as Needed Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

CRM.103 Intro to Crime Scene Technology

An in-depth study of the nature of physical evidence including techniques and methods for proper collection and preservation of evidence. This course will place an emphasis on the analysis of forensics as it relates to physical and biological evidence found at crime scenes. This course examines the general principles and methodologies used in collecting and documenting particular types of evidence. Classes are held in a crime lab environment and students will use practical hands-on exercises to demonstrate competencies of presented material. Offered: Fall or Summer Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable

CRM.121 Juvenile Justice

This course covers the history and philosophy of the juvenile justice system, legal procedure in the juvenile court, characteristics of juvenile offenders, theories of causation, and treatment and control of offenders. Special emphasis will be placed on the failure of parens patriae and the individual versus society struggle, there is a detailed examination of rehabilitation versus punitive philosophies, why rehabilitation failed, and the current philosophical foundation of American corrections. Offered: Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

CRM.141 Introduction to Corrections

This course is concerned with the evolution of societal reaction to law breakers, the sentences and the goals they seek to obtain, and the influence of the ongoing struggle between the rights of the individual and society on the correctional system. Furthermore, within the context of the individual versus society struggle, there is a detailed examination of rehabilitation versus punitive philosophies, why rehabilitation failed, and the current philosophical foundation of American corrections. Offered: Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

CRM.151 Criminal Justice & Community Relations

This course is designed to provide the student with an awareness of the problems confronting police in our turbulent society and possible courses of action which they might pursue in coping with these problems. The emphasis will be on the American pluralistic society, the various ethnic and racial groups, and their relations with each other and the police. Offered: Spring or as Needed Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

CRM.172 Introduction to Security

This course provides students with an understanding of the basic principles underlying private security issues. The core of the course content deals with risk and threat assessment. The course examines the relationship between the private and public sectors. Legal issues, as well as ethical issues, pertaining to security will be discussed. Other topics include theory and history of security, physical security, interruption, disaster preparedness, employee theft, substance abuse in the workplace, and security management. It is designed for students seeking a career in private and public security services. Offered: Fall or as Needed Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable

CRM.222 Communication in Criminal Justice

This course presents the basic concepts of the communication process as it applies to law enforcement. Emphasis will be placed on the importance of written, verbal and nonverbal communication within the criminal justice field. An individual may not count ENG 120, in addition to this course, toward graduation. Offered: Spring or as Needed Prerequisites: CRM.101 or concurrent enrollment and ENG.101 or concurrent enrollment Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable
CRM.231 Procedural Law for Police

Since procedural criminal law is concerned with the proper implementation of substantive criminal law, this course will provide the student with the opportunity to study and analyze the laws behind the various procedures dealing with the questioning of suspects through testifying in court.

Offered: Fall or as Needed
Prerequisites: CRM.101 or concurrent enrollment and ENG.101 or concurrent enrollment.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

CRM.261 Criminal Law

This course will inquire into basic concepts of criminal law, crimes against persons and property, other criminal conduct, and the punishments as designated by the nature of the crimes.

Offered: Spring
Prerequisites: CRM.101 or concurrent enrollment and ENG.101 or concurrent enrollment.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

CRM.262 Criminal Justice Internship

This work experience in criminal justice provides the student an opportunity for practical application of the fundamentals and techniques studied in the classroom. The student will be required to spend 200 hours or more within the criminal justice agency most appropriate to their career orientation. Any student working full time within a criminal justice agency will be allowed credit for this course upon approval by the Criminal Justice Coordinator. Any student with a grade point average of less than 2.0 will be required to take another course selected in consultation with the Criminal Justice Coordinator in lieu thereof.

General Education – Not Applicable

CRM.271 Criminal Investigation

In the in-depth study of the nature of physical evidence including descriptions of forensic analysis, techniques for proper collection and preservation of evidence, and interpreting the significance of scientifically evaluated evidence. Specifically, the use of such techniques as they relate to violent and property crimes, evidentiary processes, police personnel response to crime scenes, the gathering of information from witnesses, victims, and suspects, and the preparation of cases for presentation in court.

Offered: Fall
Prerequisites: CRM.101 or concurrent enrollment and ENG 101 or concurrent enrollment.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
DHG DENTAL HYGIENE

<table>
<thead>
<tr>
<th>Courses</th>
<th>Hr/Wk</th>
<th>Hr/Wk</th>
<th>Sem</th>
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<tbody>
<tr>
<td>DHG.109 Preclinic Laboratory</td>
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<td>3</td>
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<tr>
<td>DHG.110 Fundamentals of Dental Hygiene</td>
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<td>2</td>
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<tr>
<td>DHG.112 Dental Radiology</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>DHG.113 Preventive Dentistry</td>
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<tr>
<td>DHG.114 Head/Neck &amp; Oral Anatomy</td>
<td>3</td>
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<tr>
<td>DHG.115 Dental Hygiene Practice 1</td>
<td>6</td>
<td>2</td>
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</tbody>
</table>

This course provides the learner with the basic understanding of patient education with an emphasis on individual oral health counseling. Preventative Dentistry introduces the learner to the fundamental concepts of dental plaque, healthy and diseased gingival tissues, oral hygiene aids and techniques, dental caries, fluorides, and other topics and techniques related to the prevention of oral diseases. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

This course prepares the student to obtain the necessary fundamentals and background to expose and process dental radiographs. Emphasis is placed on the characteristics of radiation, radiation safety and monitoring, radiation production, operation of the x-ray unit, intraoral and extraoral radiographic films, processing and mounting radiographs, and identification of anatomical landmarks. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

This course provides the learner with the fundamental concepts of dental hygiene practice: instrumentation; instrument sharpening; assessment of health; dental and periodontal status of patients; infection control and OSHA regulations. This course closely integrates theory and practice thus providing a base from which the learner may develop the skills, knowledge, and judgment required to adequately serve the public in the profession of Dental Hygiene. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

Preventative Dentistry introduces the learner to the fundamental concepts of dental plaque, healthy and diseased gingival tissues, oral hygiene aids and techniques, dental caries, fluorides, and other topics and techniques related to the prevention of oral diseases. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

Head, Neck and Oral Anatomy is a fundamental, basic theory course upon which other dental hygiene courses are built. This course includes concepts of dental nomenclature, tooth development, dental anatomy, functions of the teeth, identification of oral structures, and occlusion. It also contains information specific to the nerve and blood supply to the head and neck as well as osteology of the skull and muscles of facial expression and mastication. Learning experiences are provided in both the classroom and laboratory settings. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

Dental Hygiene Practice I is designed to provide the student with the opportunity to develop skills and apply didactic information from Preclinical Laboratory (DHG 109) and Fundamentals of Dental Hygiene (DHG 110) to the clinical setting. Instrumentation techniques are introduced to the student via instructor demonstrations and other visual aids followed by students practicing with peer patients in the clinical setting. Dental Hygiene Practice I provides the student with the opportunity to develop data collection skills, i.e. intra and extraoral examinations, dental and periodontal assessments and charting through practice with classmates in the clinic. Admission to the Dental Hygiene program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
DHG.118 Oral Histology & Embryology 1 1

This course includes concepts of the embryological development of orofacial organs and structures as well as microscopic investigation of oral tissues and structures. Students will become acquainted with the derivation and maturation of the hard and soft tissues of the oral cavity that will be necessary to analyze and/or provide treatment in the clinical setting.
Offered: Spring
Prerequisites: Successful completion of first year, fall semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

DHG.119 Periodontology 1 2 2

This course includes study of the histologic and clinical characteristics of periodontal diseases. Study of the supporting structures of teeth in health and disease will be included. Normal, pathological and etiological considerations are discussed. Emphasis is placed on recognition of causative factors and preventive measures, which might control the advancement of destructive periodontal disease. Synthesis of knowledge for case application is emphasized. Current research in periodontology and the role of the dental hygienist in periodontal therapy will be investigated.
Offered: Spring
Prerequisites: Successful completion of first year, fall semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

DHG.120 Dental Hygiene 2 2 2

This course focuses on the fundamental knowledge and skills necessary to begin to provide dental hygiene services for patients in the dental hygiene clinic. Concepts in treatment planning, assessment of the oral cavity for the clinical patient, preventive dentistry for the clinical patient, debridement of hard and soft deposits in the oral cavity for the clinical patient, and evaluation of dental hygiene services will utilize information and skills learned in the previous semester. Along with building upon previously learned concepts, information concerning common medical emergencies in the dental office, tobacco prevention and cessation intervention, and pain control, will also be covered.
Offered: Spring
Prerequisites: Successful completion of first year, fall semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

DHG.125 Dental Hygiene Practice 2 12 4

The purpose of Dental Hygiene Practice 2 is to further the students clinical experience in the clinical setting. Application of dental hygiene clinical techniques learned in Preclinic Laboratory (DHG 109), Fundamentals of Dental Hygiene (DHG 110) and Dental Hygiene Practice I (DHG 115) will be built upon. Emphasis will be placed on skills for patient assessment, instrumentation, evaluation and documentation during the dental hygiene appointment. Other areas of focus include sequencing of treatment according to patient needs and time factors and comprehensive care for the dental hygiene patient. The first two weeks of the course will focus toward treatment of the first patient to be appointed with the student.
Offered: Spring
Prerequisites: Successful completion of first year, fall semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

DHG.200 Dental Hygiene 3 2 2

The purpose of this course is to further the student's ability to provide comprehensive dental hygiene care to clinical patients. It will cover the didactic information necessary to enable the student to correctly perform various procedures for patients in Dental Hygiene Practice III (DHG 205) and to understand the rationale behind the indications and contraindications for the procedures learned. Procedures that will be learned include advanced instrumentation, pit and fissure sealants, periodontal debridement involving the ultrasonic scaler, use of the air polisher for stain removal, application of chemotherapeutic agents, alginate impressions and pouring of study models, and analyzing diet record for nutritional counseling. The concepts of decision making, responsibility, accountability, and professionalism will be expanded upon to assist the student in enhancing proficiency in the development of dental hygiene treatment plans, as well as the assessment of medical, dental, and periodontal status of patients.
Offered: Summer
Prerequisites: Successful completion of first year, spring semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
The purpose of this course is to further the development of the instrumentation and assessment skills acquired in previous dental hygiene courses through treatment of patients of a more difficult caliber. Integration of didactic and clinical experiences will allow for the introduction and development of pit and fissure sealant placement, ultrasonic scaling, air polishing, periodontal debridement, application of chemotherapeutics, caries counseling, and alginate impressions. Emphasis will be placed on improvement of instrumentation, enhancing proficiency in the development of dental hygiene treatment plans, assessment of medical, dental, and periodontal status of patients, and increasing efficiency with patient treatment.

Offered: Summer
Prerequisites: Successful completion of first year, spring semester dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

This course is designed to aid the student in understanding the numerous special needs that are present in people in our society, ranging from cardiovascular disease to mental disorders, childhood diseases to geriatrics. Emphasis will be placed on the medically/physically compromised patients who present for dental hygiene treatment either in a clinical setting or hospital setting. Treatment planning for these compromised patients will be discussed.

Offered: Fall
Prerequisites: Successful completion of dental hygiene courses and BIO.200 BIO.211 and BIO.212.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

This course provides a spectrum of experience, which contributes to the continuing development of insight into community problems and understanding the needs of people. It stimulates awareness of community action and community dental health program development. It provides an understanding of how private practice dentistry and community dental health can work together to meet the needs of the community. When completed, the student has a working knowledge of community dental health.

Offered: Fall
Prerequisites: Successful completion of summer session dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

This course is an introduction to pathology relating causative factors to clinical manifestations. The study of gross and microscopic lesions of the teeth and related oral tissues will be included. Emphasis is placed on concepts of development/growth disturbances, diseases of microbiological origin, injury and repair, metabolic disturbances, and oral manifestations of various diseases and conditions.

Offered: Fall
Prerequisites: Successful completion of summer session dental hygiene courses, BIO 211, BIO 212 and DHG 118.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

The purpose of this course is to familiarize dental hygiene students with drugs most used and/or prescribed by dental offices as well as drug groups used to treat medical conditions. Emphasis will be placed on appropriate and thorough evaluation of medical histories. Referencing material related to pharmacology will also be emphasized.

Offered: Fall
Prerequisites: Successful completion of summer session dental hygiene courses and BIO.211 BIO.212 BIO.200 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

The purpose of this course is to further clinical experience in the practical application of oral prophylaxis techniques. Emphasis will be placed on improvement of the student’s abilities in periodontal debridement, professionalism, and treatment planning. Students will be responsible for patient care including assessment, thorough in-depth treatment planning, plaque control programs, tobacco cessation education, nutritional counseling, periodontal debridement of periodontally involved patients and medically compromised patients, polishing, fluoride therapy, and maintenance therapy. Completion of these services will further the student’s abilities to provide comprehensive dental hygiene treatment based on the individual patient needs.

Offered: Fall
Prerequisites: Successful completion of summer session dental hygiene courses.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHG.217</td>
<td>Clinical Applications Pain/Anxiety Ctrl</td>
<td>2</td>
<td>This course focuses on the clinical applications of controlling the dental hygiene patient’s pain and anxiety through the administration of local anesthesia and/or nitrous oxide. The student will develop skills in the administration of local anesthesia in the oral cavity along with learning how to administer and monitor nitrous oxide. Offered: Spring Prerequisites: Successful completion of second year, fall semester dental hygiene courses. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
</tr>
<tr>
<td>DHG.218</td>
<td>Dental Office Management &amp; Jurisprudence</td>
<td>2</td>
<td>This course prepares the graduating dental hygiene student to manage the telephone, schedule appointments, maintain patient records, receive payment, and complete third-party reimbursement forms in the private practice dental setting. The student will also learn to enter date for charges and payments, manage recall systems, maintain inventory, and written correspondence with other dental professionals. Along with the office skills, students will discuss legal and ethical dental hygiene practice issues, develop a resume, and learn interviewing skills. Students will also review for the state dental hygiene practice acts for Illinois and Iowa in preparation for the state jurisprudence examination. Offered: Spring Prerequisites: Successful completion of second year, fall semester dental hygiene courses. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
</tr>
<tr>
<td>DHG.219</td>
<td>Periodontology</td>
<td>2</td>
<td>This course focuses on surgical aspects of periodontology. The student will develop basic knowledge on the role of occlusion in periodontal health and disease, principles of periodontal surgery, management of soft tissue, dental implants, implant maintenance, and periodontal emergencies. Offered: Spring Prerequisites: Successful completion of second year, fall semester dental hygiene courses. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
</tr>
<tr>
<td>DHG.220</td>
<td>Dental Hygiene 5</td>
<td>1 2 2</td>
<td>This course is designed to prepare the student to make the transition from the educational setting to the real world of dental hygiene by covering dental specialties, advanced treatment planning, and preparation for the National Dental Hygiene Board Examination. This course includes a study of the rationale, indications and/or contraindications for amalgam polishing, periodontal dressings, rubber dams, suture removal, and dental cements/liners/varnishes. Emphasis will be placed on treatment planning for comprehensive dental hygiene care as would be expected in private practice. Preparation for the National Dental Hygiene Board Examination will involve deliberation of case studies as a review of all topics covered on the examination. Offered: Spring Prerequisites: Successful completion of second year, fall semester dental hygiene courses. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
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<tr>
<td>DHG.225</td>
<td>Dental Hygiene Practice 5</td>
<td>15 5</td>
<td>The purpose of this course is to further clinical experience in the practical application of dental hygiene clinical techniques and providing comprehensive care for the patient in preparation of the student entering the real world of dental hygiene. Emphasis will be placed on the student's ability to improve upon periodontal debridement, professionalism, and treatment planning. Students will be responsible for patient care including assessment, thorough in-depth treatment planning, plaque control programs, tobacco cessation education, nutritional counseling, periodontal debridement of periodontally involved patients and medically compromised patients, polishing, fluoride therapy, and maintenance therapy. Completion of these services will further the student’s abilities to provide comprehensive dental hygiene treatment based on the individual patient needs in an efficient manner as expected in private practice. Offered: Spring Prerequisites: Successful completion of second year, fall semester dental hygiene courses. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
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Courses

**DRF:100 Basic Drafting**

This introductory course in drafting is for students who either did not have a previous drafting course or wish a review of previous work taken. Students will have the opportunity to obtain proficiency and skill in lettering, geometric construction, object visualization, sectional views, auxiliary views and revolutions.

General Education – Not Applicable

**DRF:200 Descriptive Geometry**

This course presents a comprehensive study of graphic analysis and accurate solutions based on the principles of orthographic projection.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
ECO ECONOMICS

Courses

**ECO.101 Introduction to Economics**

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This is a survey course designed to expose students to economics, providing a broad introduction to the theory, problems and applications found in daily life from the view of households, business and government. The course is designed for the social science major as well as the student who wants a greater understanding of economic basics, including economic fluctuations. Among the topics to be covered are the concepts of incentives, information, supply and demand, trade and globalization, international economics, money and banking.

Offered: Fall or as Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
General Education – Social Science

**ECO.201 Principles of Macro Economics**

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This course is designed to introduce students to the basic economic principles and how to think about the economy in terms of the impact of these principles. Topics include: economic systems, demand and supply theory, government and its role, and fiscal and monetary policies. The course is intended for students who plan to pursue a bachelor’s degree as well as those who desire a better understanding of the economy. While there is no prerequisite for this course, students are encouraged to complete basic courses in related areas prior to enrollment.

Offered: Fall or Spring
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better and MAT.083 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. S3 901
General Education – Social Science

**ECO.202 Principles of Micro Economics**

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This course focuses on industrial and labor organizations, supply and demand, and profit maximization under varying conditions of competition. Current topics, such as the environment and public policy, are considered. The course is designed for students planning to pursue a bachelor’s degree as well as those who desire a better understanding of the economy. While there is no prerequisite for this course, completion of ECO 201 is recommended before enrollment.

Offered: Fall or Spring
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better and MAT.083 with minimum grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. S3 902
General Education – Social Science
EDU EDUCATION

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**EDU.101 Introduction to Education**  
3 2 4

This course provides an orientation to the teaching profession. It is designed for those who are considering a career in education. Among the topics studied are Motives for Teaching, Social Problems and Tensions Points in schools, Curriculum, Technology, Legal and Ethical issues, and Philosophical Foundations. In addition, there is a minimum 32 hours required for the field experience component. One hour of the 4 credit hours is for field experience. The Field Experience component includes meeting two times a week as a cohort that benefits from discussion, reading, and exchange of ideas from the field experience.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**EDU.201 Educational Psychology**  
3 3

Educational Psychology examines psychological principles as they apply to education in the areas of learning, a lifespan approach to child and adolescent development, social influences on learning, and the teacher as a classroom leader. Both the individual and the peer group are studied from physical, mental, emotional, and social points of view. There will be opportunities in professional activities. Some examples are Phi Delta Kappa, Council for Exceptional Children, Illinois Science Teachers’ Association and the K-8 Science Update Conference.

Offered: Fall or Spring or Summer

Prerequisites: PSY.101

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
# ELT ELECTRICITY

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<tr>
<td><strong>ELT.100 Electrical Fundamentals</strong></td>
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<td>This course introduces the fundamentals of electrical and electronic circuits. Calculation and measurement of voltage, current, and resistance are emphasized. Through the use of lab activities, various wiring and testing methods utilizing multimeters are investigated. Offered: Fall and Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>ELT.104 Industrial Electrical Control</strong></td>
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<td>This course introduces the fundamentals of industrial electrical control. Basic theory including electron flow, Ohm’s Law, series parallel circuit characteristics, and electrical power calculations as applied to industrial control applications is covered. Lab work involves the construction and testing of representative industrial electronic control circuitry. Offered: Spring Prerequisites: ELT.100 Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>ELT.107 Digital Logic &amp; Circuits</strong></td>
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<td>This course covers the fundamentals of digital logic. It will also include some of the procedures and tools used for troubleshooting digital circuits. Simple switching circuits will be covered first as a simple but concrete introduction to the concepts of Boolean Algebra. Then modern integrated circuit realizations of digital logic gates will be discussed. Basic principles of analysis and design using these gates will be covered. Coverage will include basic combinatorial and sequential circuits. Basic trouble-shooting techniques using a logic probe will be employed. Offered: Fall Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Lab Science Not Applicable</td>
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<td><strong>ELT.119 Industrial Electronic Control</strong></td>
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<td>This course is an in-depth evaluation of industrial electronic control methods and devices. The operating characteristics of various types of solid state controls and sensors, including proximity, photoelectric, thermistors, thermocouples, SCR, triacs, thyristors, transistors, timers, counters, and advanced electronic motor controls are studied. The lab work involves the operation and analysis of industrial electronic circuits and devices. Offered: Fall Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>ELT.120 Electrical/Electronics Troubleshooting</strong></td>
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<td>This course covers the essential techniques of troubleshooting industrial electrical and electronic circuits and devices. The lab work includes the use of test equipment, instrumentation, and computer simulation to develop the skills necessary to improve troubleshooting accuracy and cut troubleshooting time. Offered: Fall Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>ELT.121 Rail/Off Hiway Motive Power Electrical</strong></td>
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<td>Building on fundamentals of basic electrical and electronic circuits, students will study AC and DC fundamentals and safety, power generation, inverters and VFDs, propulsion, dynamic braking, ground fault protection, AC/DC motors, low voltage and high voltage control systems, lockout tagout, and digital and analog controls. Through theory and laboratory activities students will gain a practical understanding of the electrical fundamentals for supplying power to an engine, vehicle, etc. Offered: Fall or Spring Prerequisites: ELT.100 Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>ELT.200 National Electrical Code</strong></td>
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<td>Using the National Electrical Code as a reference, students will be trained on how to design and construct electrical systems according to NEL requirements. Residential, industrial, and commercial wiring and power distribution systems will be investigated. Included will be residential/commercial/industrial circuits, lighting requirements, grounding, wiring methods, and hazardous locations. Offered: Fall Prerequisites: ELT.110 Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable. General Education – Not Applicable</td>
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**ELT.207 Electrophydraulic Process Control**  
2 3 3

This is a course designed to provide the student with a solid background in fluid power control principles and theory, as well as modern techniques for interfacing industrial muscle (hydraulic, pneumatic, vacuum operated devices) with the ubiquitous industrial brain (electronic-microprocessor) generation of controllers. There will be discussions of electric motor drives, solenoid operated devices, pressure switches/ transducers, relays, limit switches, programmable controls, servo systems, analog and digital control, open and closed loop control, feedback, symbology, instrumentation, etc. There will be emphasis on demonstration of relevant hardware, as well as class participation in design and troubleshooting of industrial types of circuits.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.208 Programmable Controllers**  
2 2 3

This course will introduce the student to the fundamental concepts of programmable controllers. Through lecture and lab exercises, the student will be exposed to the hardware, troubleshooting, and programming of controllers. Relevant examples of programmable controller types will be covered.

Offered: Spring

Prerequisites: ELT.102

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.209 AC/DC Drives and Servos**  
2 2 3

This course investigates modern trends in industrial motor controls. Students will be exposed to the advantages and disadvantages of AC and DC solutions. Discussions will include soft start and servo control. Much emphasis will be on AC Variable Frequency Drives.

Offered: Spring

Prerequisites: ELT.104

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.212 Industrial Electricity**  
2 3 3

This course provides a basic overview of various industrial topics such as distribution, wiring methods, and enclosures.

Offered: Spring

Prerequisites: ELT.119

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.213 Process Control & Instrumentation**  
2 3 3

This course covers the field of industrial measurement and control. Data acquisition methods, including the sensing, measuring, and transmission of industrial process variables, are introduced. The principles of automatic process control, measurement, programmable controller and distributed control are studied.

Offered: Spring

Prerequisites: ELT.100 with a grade of C or better.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.214 Advanced Program Controllers**  
2 2 3

This course will extend student knowledge of programmable controllers to include proprietary and open networks, automation equipment interfacing, and operator interfaces. Through the use of lab activities, various network protocols, remote I/O and touch screens will be interfaced and programmed.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.215 Design of Industrial Control Systems**  
2 2 3

This is an integration course utilizing knowledge gained in previous courses and applied to the design of a typical industrial control system. Computer-aided design software is introduced and utilized to create drawings required for the construction of a control panel. Lab activities will include generation of control system CAD drawings and the construction of a control panel which includes both electrical and electrohydraulic components. The use of vendor-supplied product configuration software and CAD blocks will be emphasized.

Offered: Fall

Prerequisites: ELT.104 and ELT.208

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**ELT.216 Data Acquisition Systems Program & Apps**  
2 2 3

This course will emphasize the use and application of Data Acquisition Systems and associated programming software. Instrumentation circuitry and sensors will be interfaced to an industrial data acquisition system.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
**ELT.219 Industrial Automation Applications**  1  4  3

This course will explore the integration of modern industrial control systems and instrumentation to automated industrial equipment. Prototype machinery will be constructed in the laboratory and programmed to perform a selected task.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
## EMS.101 Emergency Medical Technician

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This is an entry level course in the field of Emergency Medical Services. The course emphasizes the development of student skills in recognition of illnesses and injuries and proper procedures of emergency care. The training promotes an assessment based approach to identifying illness and injury and developing an appropriate plan of treatment within the limitations of basic life support practices, including the use of prehospital patient care and rescue equipment. The roles, responsibilities and skills required by state and national standards are defined. The student will develop skills to provide basic emergency care, communication and interpersonal relationships, handling and positioning, documentation, transportation methods, and extrication of the critically ill and injured person. This course includes 120 hours of classroom and laboratory instruction plus 16 hours of clinical in-hospital experience. Upon completion of this course students are eligible to take the Illinois EMT licensure exam. Licensure is required for employment as an EMT.

General Education – Not Applicable

## EMS.110 Fundamentals of Paramedic

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This course, in conjunction with Paramedic Practice 1, is designed to introduce the student to the fundamentals of paramedic services including a historical perspective of the EMS system in comparison to the current operations, the roles and responsibilities, safety and well being of the paramedic, legal issues and regulatory issues, communication and documentation, and basic patient assessment skills. This course closely integrates theory with practice, thus providing the foundational base from which the learner may develop further skills, knowledge and judgment of the paramedic.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where program structure permits.

General Education – Not Applicable

## EMS.112 Paramedic Pharmacology

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This course provides the paramedic student with the comprehensive knowledge of emergency pharmacology, pharmacokinetics, and pharmacodynamics related to paramedic practice, includes cardiovascular, respiratory, analgesic, gastrointestinal, antibiotic and central nervous system medications. Sources of drugs, reference materials for drugs, and legal considerations will be discussed as well as classification of drugs and how each affects the respective body system. The student will gain the knowledge and psychomotor skills required to safely and precisely prepare and administer drugs that a paramedic may commonly administer according to local protocol. The student will learn proper procedures for the administration of medications, equipment needed, techniques used with various routes of administration and how to calculate drug doses utilizing mathematical principles. This course provides 32 theory hours and 16 lab hours.

Offered: Fall

Prerequisites: EMS.101 with grade of C or better and active EMT-B License.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where program structure permits.

General Education – Not Applicable

## EMS.115 Paramedic Practice 1

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Paramedic Practice 1 is designed to provide the student with the opportunity to develop skills and apply didactic information from Fundamentals of Paramedic (EMS.110) and Paramedic I (EMS.112) to the clinical and field settings respectively. Paramedic Practice 1 provides the student with the opportunity to become familiar with equipment and procedures used in the profession as well develop assessment skills. The course culminates in applying skills and knowledge learned to given case studies.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
**EMS.120 Paramedic I**

This course is designed to introduce and prepare the students to develop proficiency in the roles, responsibilities, and skill level required by state and national standards for licensing as a Paramedic. This course will familiarize the paramedic student with the EMS systems, legal and regulatory issues, professionalism, therapeutic communication, documentation, critical thinking, safety, and quality care standards. The paramedic student will be provided with relevant anatomy and physiology and lifespan development as it applies to the various medical situations for which EMS is summoned. The student will learn basic patient assessment skills to begin pre-hospital assessment and treatment for each type of medical situation(s) discussed in this course. Emphasis is placed on emergency pharmacology, medication administration and intravenous access, patient monitoring technology, pathophysiology and patient assessment, cardiac management, and airway management. The course closely integrates theory with laboratory practice, thus providing the foundational base from which the learner may develop psychomotor skills, knowledge and judgment of the paramedic by studying the different medical situations to gain a high level of understanding through discussion, learning activities, case studies, skills, and simulation in the class and lab environment. This course provides 96 theory hours and 32 laboratory hours.

Offered: Fall and Spring

Prerequisites: EMS 101 with a grade of C or better and/or Active, EMT-B License. Corequisite EMS 125.

Applicable toward graduation at Sandburg where program structure permits:

- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education: Not Applicable.

**EMS.125 Paramedic Practice I**

Paramedic Practice I, EMS 125 is a paramedic practicum that will provide students the opportunity to complete a minimum of 90 hours of clinical experience and a minimum of 30 hours of field experience under the supervision of preceptors. Paramedic Practice I is designed to provide the student with the opportunity to build upon cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains from Paramedic I, EMS 120. Student-instructor conferences are scheduled throughout the practicum to evaluate progress. Students will gain these clinical and field experiences through observation and hands-on experiences at Galesburg Cottage Hospital, OSF St. Mary’s Medical Center, and Galesburg Hospitals Ambulance Service. Paramedic Practice 1 provides the student with the opportunity to become familiar with equipment and procedures used in the profession as well develop assessment skills.

Offered: Fall

Prerequisites: Take EMS.101 with a grade of C or better and/or Active EMT-B License and Corequisite: EMS.125.

**EMS.130 Paramedic II Medical**

This course will build on information learned in EMS 120, Paramedic I, and EMS 125, Paramedic Practice I, as the student will continue studying the different medical emergencies for which EMS is summoned and care is provided by pre-hospital personnel to help reduce morbidity and mortality. The student will also learn the acute management of medical emergencies for the pediatric, obstetric, geriatric, and the challenged patient(s). A high level of understanding will be developed for situations involving systems such as pulmonology, cardiology, neurology, endocrine, immunology, hematology, gastrointestinal, genitourinary, musculoskeletal, and integumentary, including disorders of those systems. The student will also learn about infectious and communicable diseases, and psychiatric and behavioral disorders. A brief review of important anatomy and physiology as it applies to the different medical emergencies in question will be included, as well as relevant pathophysiology, providing the student with the needed information to begin pre-hospital assessment and treatment for each type of medical emergency discussed. Students will gain this high level of understanding for patient(s) with medical emergencies based on the body systems involved through discussion, learning activities, laboratory activities, and case studies. This course provides 56 theory hours and 16 laboratory hours. IAI Course No.: Not Applicable

Offered: Spring/Fall

Prerequisites: Take EMS 120 and EMS 125 with a grade of C or Higher

Applicable toward graduation at CSC where program structure permits:

- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education: Not Applicable.

**EMS.131 Paramedic II Trauma**

This course will build on information learned in EMS 120, Paramedic I, and EMS 125, Paramedic Practice I, as the student will continue studying the different trauma emergencies for which EMS is summoned and care is provided by pre-hospital personnel to help reduce morbidity and mortality. A high level of understanding will be developed for situations involving systems such as pulmonology, cardiology, neurology, endocrine, immunology, hematology, gastrointestinal, genitourinary, musculoskeletal, and integumentary, including disorders of those systems. The student will also learn about infectious and communicable diseases, psychiatric and behavioral disorders. A brief review of important anatomy and physiology as it applies to the different trauma emergencies in question will be included, as well as relevant pathophysiology, providing the student with the needed information to begin pre-hospital assessment and treatment for each type of trauma emergency discussed. Students will gain this high level of understanding for patient(s) with trauma emergencies based on the body systems involved through discussion, learning activities, laboratory activities, and case studies. This course provides 56 theory hours and 16 laboratory hours. IAI Course No.: Not Applicable

Offered: Spring/Fall

Prerequisites: EMS 120 and EMS 125 with a grade of C or Higher

Applicable toward graduation at CSC where program structure permits:

- Degree or Certificate: AAS, AGS, and Certificates where applicable.
- General Education: Not Applicable.
Paramedic Practice II, EMS 135 is a paramedic practicum that will provide students the opportunity to complete a minimum of 150 hours clinical experience and a minimum of 60-130 hours field experience under the supervision of preceptors. Paramedic Practice II is designed to provide the student with the opportunity to build upon cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains from Paramedic I, EMS 120 and Paramedic II, EMS 130. Students will gain experience in the delivery of prehospital advanced life support patient care. Student-instructor conferences are scheduled throughout the practicum to evaluate progress.

Offered: Spring
Prerequisites: Take EMS.120 with a grade of C or better and EMS.125 with a grade of C or better. Take EMS.130

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

EMS.200 Paramedic IV

The student will study the different trauma emergencies for which EMS is summoned for which care is provided by pre-hospital personnel to help reduce morbidity and mortality. Coupled with EMS.205, Paramedic Practice 4, a high level of understanding for the pediatric and geriatric patient(s) and traumatic emergencies based on the body systems involved will be gained through discussion and learning activities and case studies.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

EMS.205 Paramedic Practice 4

Through simulations and case studies, this course will allow students to learn how to provide care for pediatric and geriatric patient(s) and trauma emergencies for which care is provided by pre-hospital personnel to help reduce morbidity and mortality. Further experience will be gained through clinical experience at area medical institutions through observation or hands-on experiences.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

EMS.210 Paramedic III

This course prepares the graduating paramedic student with the knowledge and principles associated with the acute management of medical or traumatic emergencies for the pediatric, obstetric, geriatric, and the challenged patient(s). Coupled with EMS 215, Paramedic Field Internship, a high level of understanding for the pediatric, obstetric, and geriatric patient(s) with traumatic emergencies based on the body systems involved will be gained through discussion, learning activities, laboratory activities, and case studies. Students will learn about operations of an ambulance as well as medical incident management, environmental emergencies, rescue awareness and operations, hazardous material incidents, crime scene awareness, and terrorism. Preparation for entry level paramedic practice will be supported with discussion of contemporary paramedic practice and current Illinois laws related to the paramedic profession. The student will be prepared to take the state or national examination upon completion of this course and EMS 215 Paramedic Field Internship. This course provides 40 theory hours and 16 laboratory hours.

Offered: Summer
Prerequisites: Take EMS.130 with a grade of C or better and EMS.135 with a grade of C or better.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

EMS.220 Paramedic Field Internship

In Paramedic Field Internship, EMS 215 will provide students the opportunity to work 450-550 field internship hours under the supervision of an Illinois licensed EMT-Paramedic preceptor, gaining experience in the delivery of prehospital advanced life support patient care. Students get ambulance experience and must meet a minimum of 40 ALS patient contacts, and must be documented as the Team Leader in 20 of those patients. Student-instructor conferences are scheduled throughout the internship to evaluate progress. On successful completion of EMS 220, students are eligible to take the state or national examination.

Offered: Offered: Fall/Spring
Prerequisites: Prerequisite: EMS 131 and EMS 132 with a grade of C or better and EMS 135 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education No. General Education: Not Applicable IAI Course No.:
General Education – Semester Hours: A) Credit 6 B) Lecture 0 C) Lab 18
ENG ENGLISH

Courses

**ENG.095 Esst. Reading & Writing Strategies** 3 3
This course is the first course in a two-part preparatory sequence that precedes transfer-level composition courses. This course is designed to help students improve their comprehension, vocabulary, and critical reading skills through intensive writing assignments. It introduces students to the connection between the reading and writing processes. Students will participate in a variety of activities and projects to become more successful in reading and writing for college-level courses. These activities and projects include but are not limited to group discussions, reading responses, peer workshops, and essays. Placement in ENG 095 is based upon the student's entrance exam score. IAI Course No.: NA Offered: Fall
Prerequisites: Appropriate Placement Score
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: NA General Education: NA.
General Education -- Not Applicable

**ENG.097 Introduction to Composition** 3 3
This course is the second course in a two-part preparatory sequence that precedes transfer-level composition courses. This course is designed to encourage the student to develop his or her voice and to write and read at the college level. It provides a solid foundation in grammar, mechanics, and organizational skills. The course requires substantial practice in writing coherent essays about readings in order to demonstrate critical thinking skills. Placement in ENG 097 is based upon completion of ENG 095 with a grade of C or higher or upon the student's entrance exam score. IAI Course No.: NA Offered: Fall, Spring, Summer
Offered: Fall, Spring & Summer
Prerequisites: Take ENG.095 with a grade of C or better or the appropriate placement score.
Applicable toward graduation at CSC where program structure permits: Degree or Certificate: NA General Education: NA.
General Education -- Not Applicable

**ENG.099 Writing Lab** 2 1
This course is part of an Accelerated Learning Program (ALP) for students who have scored appropriately on the placement exam and are taking ENG 101 concurrently. This course will foster students' successful completion of ENG 101. Course topics focus on word processing essays, essay structure and development, grammar, mechanics, and revision techniques. IAI Course No.: NA Offered: As needed
Prerequisites: Appropriate Placement Score
Offered: As Needed
Prerequisites: Appropriate Placement Score
Applicable toward graduation at CSC where program structure permits: Degree or Certificate: NA General Education: NA.
General Education -- Not Applicable

**ENG.101 Freshman Composition 1** 3 3
This course is the first in a sequence of two freshman composition and rhetoric courses. It is designed for individuals planning to pursue a bachelor's degree as well as those who wish to develop proficiency in writing. Emphasis is on critical reading, organization, logical thought, paragraphing, sentence structure, grammar and punctuation. Also studied will be argumentation and inductive/deductive reasoning. Offered: Fall or Spring or Summer
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. C1 900
General Education -- Communications

**ENG.102 Freshman Composition 2** 3 3
This course is second in a sequence of two freshman composition and rhetoric courses. Emphasis is on reading and discussing various types of prose to generate ideas for writing critical and persuasive papers, including one documented research paper.
Offered: Fall or Spring or Summer
Prerequisites: ENG.101 with a grade of C or better and a passing mark on the Comp I Proficiency Exam.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. C1 901
General Education -- Communications

**ENG.120 Report Writing** 3 3
This course is designed to teach the basic concepts of report writing for the business and industrial environment. Students will be taught techniques for gathering information, audience analysis, expository writing techniques, information organizational procedures, and methods of achieving a clear style of writing. Students will study routine and non-routine reports, business research reports, and business plans, policies and procedures.
Offered: Spring
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education -- Not Applicable
**ENG.130 Introduction to Journalism**  
3 3  
This course introduces the student to the functions of mass media with emphasis on the recognition of what makes news; the obtaining of facts through interview, investigation and research; and the writing of types of stories such as feature, news story, and editorial in an acceptable journalistic style. Also, the student has an opportunity to develop a working knowledge of the mechanics of producing a newspaper, e.g., paper layout, advertising, etc. Underlying the course is the ideal of the dedication of the news media and the responsibility of the journalist to the public interest. Students who have completed or are currently enrolled in this course are eligible for enrollment in ENG 140 (College Newspaper).  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable  
General Education: Not applicable-elective only  
**ENG.132 Introduction to Mass Communication**  
3 3  
This course provides an overview of the nature, functions, and responsibilities of the mass communication industries in a global environment with an emphasis on the media's role in American society. This course is an introduction to how the mass media are organized and how they function in modern society, their technological bases, economic and political foundations, and social implications.  
IAI Course No. MC 911  
General Education – Elective Only  
**ENG.140 College Newspaper**  
2 1  
This course provides training in news reporting and writing, feature writing, make-up, and editorial work. In addition, the development of policy for publication and the implementation of that policy are included. Course work is directed concerned with publication of the College newspaper. This course allows students who work on the College newspaper staff an opportunity to receive credit for one semester of such participation, up to a maximum of four semester hours.  
Offered: Fall or Spring  
Prerequisites: ENG.130 or concurrent enrollment  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable  
General Education: Not Applicable-Elective Only  
**ENG.141 College Literary Magazine**  
2 1  
This course provides experience in writing, editing, layout, coordinating, resource management, printing and publication of Carl Sandburg College's literary magazine, Phizzogs. The course may be repeated once for credit.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable  
General Education – Not Applicable Elective Only  
**ENG.151 Introduction to Film Art**  
3 3  
This course examines film as an art form. This examination includes the historical development of film, its aesthetic importance, and its social impact, as well as technical aspects of film and production methods. Students will be introduced to film theory and critique, and they will learn how to evaluate and critically analyze film.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable  
General Education: Fine Arts  
IAI Course No.: IA F2 908  
General Education – Fine Arts  
**ENG.160 Introduction to Fiction**  
3 3  
This course is a survey of the short story and the novelette. Emphasis is placed on the analysis of the elements of fiction, such as characterization, conflict, symbol and plot. How to write about studied.  
Offered: Prerequisite: ENG 101  
Prerequisites: H3  
Applicable toward graduation at Sandburg where program structure permits. Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable  
General Education: Humanities, Human Relations.  
IAI Course No. IAI Course No.: H3 901  
Offered: Fall  
General Education – 901  
**ENG.170 Introduction to Drama**  
3 3  
This course presents a study of drama as literature. It will give the student a reading knowledge of diverse selections throughout theatre history from Ancient Greece to Contemporary American Theatre. Genres include; comedy, tragedy, tragicomedy, and theatre of the absurd. Genres include; comedy, tragedy, tragicomedy, and theatre of the absurd.  
IAI Course NO.: H3 902  
Offered: Fall, Spring, Summer  
Prerequisite: ENG 101  
Prerequisites: ENG.101  
Applicable toward graduation at CSC where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
General Education: Humanities, Human Relations.  
IAI Course No. H3 902  
General Education – Humanities Human Relations  
**ENG.180 Introduction to Poetry**  
3 3  
Fostering an appreciation of poetry through analysis is the aim of this course. Samples of many periods, including contemporary works, will be studied, as well as the elements of poetry: diction, image, theme, symbol, rhythm, and meter. Skills of reading poetry will also be emphasized. Thematic concerns of race, gender, and ethnicity are, of course, included in the written and oral analysis of these poems.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. H3 903  
General Education – Humanities Human Relations
ENG.211 Creative Writing 1  
3 3  
The student's writings are appraised by the tutorial method and group critique. The concept of audience and the development of individual style, approach and vision are stressed. In addition to writing assignments, readings in contemporary fiction, poetry, drama and discursive writing are recommended here as appropriate. While there is no formal prerequisite, the ability to handle standard English usage is essential. 
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only 

ENG.212 Creative Writing 2  
3 3  
This is a second course in creative writing. Again, the student's writing is appraised by the tutorial method and group critique. The concept of audience and the development of individual style, approach and vision are emphasized further. Readings which are pertinent to writing assignments are recommended as appropriate. 
Offered: Fall or Spring  
Prerequisites: ENG.211  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only 

ENG.221 American Literature 1  
3 3  
This course surveys the major literary works by American authors from Colonial times to and including the Transcendentalists. 
Offered: As Needed  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 914  
General Education – Humanities Human Relations

ENG.222 American Literature 2  
3 3  
This course surveys major literary works by American authors from the emergence of modern American literature, including the Realists and the Regionalists, to the present. 
Offered: As Needed  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 915  
General Education – Humanities Human Relations

ENG.231 British Literature 1  
3 3  
This course is a survey of the great literary works by British authors from the beginning to the 19th century. 
Offered: As Needed  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 912  
General Education – Humanities

ENG.232 British Literature 2  
3 3  
This course is a survey of the great literary works by British authors from the 19th century to the present. 
Offered: As Needed  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 913  
General Education – Humanities

ENG.240 Women and Literature  
3 3  
This course focuses on literature written primarily by, but not limited to, women from various historical and literary periods. It will explore significant historical, societal conditions and contributions through readings, film, and other mediums with specific emphasis on how women have presented themselves and have been presented by others. 
Offered: Fall or Spring  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 911D  
General Education – Humanities

ENG.250 African American Literature  
3 3  
This course is an examination of the literature of African Americans with emphasis on interpretative and critical skills of all genres of several periods. Study of the oral tradition as a distinctive literary mode of expression is also included. 
Offered: As Needed  
Prerequisites: ENG.101  
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. H3 911D  
General Education – Human Relations
ESC EARTH SCIENCE

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**Courses**

*ESC.100 Introduction to Earth Science* 3 2 4

This course introduces the student to the study of the forces shaping Earth's surface with an emphasis on geological formation processes and the human impact on the environment. Topics will include the study of rocks and minerals, plate tectonics, hydrology, resource conservation, pollution, climatology, and volcanic processes.

Offered: Spring or as Needed
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Science Lab Science
FRE FRENCH

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<th>Disc</th>
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**FRE.101 Elementary French 1**  
4  
4

This is the first sequence of two semesters providing a first year college study of French. It will provide the fundamentals for transfer credit or a review of basic skills.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**FRE.102 Elementary French 2**  
4  
4

This is the second sequence of two semesters providing a first year college study of French. It will provide the fundamentals for transfer credit or a review of basic skills.  
Offered: As Needed  
Prerequisites: FRE.101  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, and Certificates where applicable.  
General Education – Not Applicable Elective Only
## GEO GEOGRAPHY

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<td>GEO.100 Human Geography</td>
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<td>GEO.110 World Regional Geography</td>
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The purpose of this course is to introduce students to the study of geography as a social science by emphasizing the relevance of the basic concepts in geography to cultural and human concerns. A primary learning objective is the understanding of the impact on the natural environment from natural resources, economic activity, and cultural characteristics.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S4 900

General Education – Social Science Human Relations

A survey of the world’s regions, emphasizing the spatial arrangements of resources, population, institutions, economic activities, and cultural landscapes, and their significance for distinctive regional problems.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S4 901

General Education – Social Science Human Relations
GER GERMAN

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<tr>
<td>GER.101 Elementary German 1</td>
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This is the first semester of two semesters providing a first year of college study of German. The course will offer speaking, reading, writing, listening comprehension and essentials of grammar, as well as a cultural background of the three German-speaking countries. It will provide the fundamentals for transfer credit or a review of basic language skills.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

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<tr>
<td>GER.102 Elementary German 2</td>
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This is the second semester of two semesters providing a first year of college study of German. This course offers basic tools for communicating in both written and spoken German. It will provide the fundamentals for transfer credit or a review of basic skills.

Offered: As Needed

Prerequisites: GER.101

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
**Courses**

**HIS.105 American History to 1877**

This course presents a survey of United States history from the European discovery to the close of the Reconstruction Era. It emphasizes the economic, cultural, and political factors which led to the development of one nation from a diversity of peoples. Topics studied are the religious and social structure of colonial America, the factors leading to the break with England, the democratization of America, Manifest Destiny, sectional and social tensions leading to the Civil War, Reconstruction, and the beginnings of industrialization. The course is intended for individuals who plan to pursue a bachelor's degree and those who desire to strengthen their understanding of the development of our national institutions.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. *IAI Course No. S2 900*

General Education – Social Science

**HIS.106 American History From 1877**

This course is a survey of major economic, political, and social trends from the Reconstruction Era to the present. Among the topics examined are the growth of America as a major industrial and military power, the problems of minorities, the Cold War, and the post-Cold War era.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. *IAI Course No. S2 901*

General Education – Social Science

**HIS.125 Western Civilization 1**

This course surveys the evolution of European civilization from prehistory through the age of Renaissance and the Reformation concluding with the end of the Thirty Years War in 1648. Economic, political, and social developments are examined. Analogies are drawn between historical and contemporary problems in order to allow the student to view the contemporary world from different perspectives. The course is intended for individuals who plan to pursue a bachelor's degree and for those who desire to broaden their understanding of the people and events that shaped our world.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. *IAI Course No. S2 902*

General Education – Social Science Human Relations

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**HIS.126 Western Civilization 2**

This course surveys the rise of the modern European state system from the era of religious wars to the present. Major social, economic, artistic, and political trends are traced to include the development of ideologies such as fascism and Marxism. Africa and Asia are covered in terms of their relationship to the West.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. *IAI Course No. S2 903*

General Education – Social Science Human Relations

**HIS.217 History of New York**

This course is designed to introduce students to the history of New York City. The course will include emphasis on the unique social and cultural characteristics; political institutions; technological, environmental and geographic elements that make New York City a unique environment.

The instructional approach will be that of a seminar and the course will include a one-week field research experience in New York City visiting various historical locations examined in the course study. The course is not to be taken more than once.

Offered: Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable. General Education – Not Applicable Elective Only

**HIS.260 US History-The Sixties**

This course examines political, social and cultural changes in the United States during the 1960's. It begins with a study of major events in the 1950's that set the tone for the social movements that developed during the 1960's. Special attention and focus will be given to the origins and evolution of various social movements and the interrelationships among these movements. The course also examines the impact the 1960's has had on individuals and future social movements, including how current political discourse has been influenced by the decade.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable. General Education – Not Applicable Elective Only

**HIS.270 World War II and the Holocaust**

Examines the causes and course of World War II and the Holocaust, including the rise of fascism; European, Japanese, and U.S. imperialism in Asia; the course of the war in Europe and Asia; the home fronts of the belligerent countries; and the march toward the final solution.

Offered: Fall or Spring

Prerequisites: Take HIS.106.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS AAS, AGS and Certificates where applicable. General Education – Not Applicable Elective Only
HIS.285 History of Africa: 1500 to Present

This course is designed to survey the history of the African continent since 1500, giving specific attention to its people, cultures, social structures, and political interactions with the rest of the world. Students will gain insight into the roles that Africa, specifically Africans, have played in the development of modern societies.

Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Social Science Human Relations

HIS.294 American Military History

This course is a survey of American military history from the colonial period through Vietnam. The course examines the evolution of America's military forces to meet changing defense requirements. Selected campaigns from Americas wars are analyzed in light of the principles of war to determine how these principles were followed or violated. The impact of civilian attitudes on the conduct of operations is also discussed.

Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
Courses

**HTH.120 Health**

This course focuses on the dynamics and relationships of family, community, and personal health issues. The course content includes units on mental health, sexuality, disease, death, and other issues of current concern. The Internet is used extensively as a supplement and assignments using the Internet will be required.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**HTH.130 First Aid**

In this course students will be learning how to make appropriate decisions regarding first aid care and how to respond correctly to emergencies. Students will develop first aid skills via practice on mannequins and may be eligible for CPR and/or First Aid certification by the American Red Cross. Other medical emergency situations studied include water safety, substance abuse, poisoning, bleeding, shock, and injuries of various types. Also emphasized is the importance of a person's maintenance of a safe and healthy lifestyle.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**HTH.140 Wellness**

Students will learn the importance of life-long physical fitness and the desirability of adhering to positive lifestyle behaviors. The physical, emotional, vocational, intellectual, and spiritual aspects of wellness will be explored. Internet assignments will be required. Students will be expected to exercise during each week at a CSC facility. Concurrent enrollment in KIN 140, KIN 141, KIN 142, KIN 143 or KIN 145 is prohibited.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**HTH.150 Drug Use and Abuse**

This course is designed to introduce the many-sided problems of drugs in our society including the psychological, sociological, and physiological effects of drug use and abuse. This course encourages students to explore their own decisions on use or abstinence and teaches assertiveness skills to protect and defend this choice with others. Personal motivations and behaviors are identified. The intent of the course is to provide facts, attitudes, and opinions necessary to understand what drugs do, how they do it, who uses them, and why. Also, modes of treatment as well as legal and ethical issues in drug abuse are discussed. Students will also learn how to access online Web resources.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
HYD HYDRAULICS

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Courses

**HYD.101 Hydraulics and Pneumatics**

This course is designed for persons who desire to become employed, or upgrade their employment, in any area which demands a basic knowledge about hydraulics and pneumatics. It provides an opportunity to learn the fundamental concepts regarding the transmission of power through liquids and gases. Also, the structure and function of the various pieces of equipment which are used to contain or transfer those liquids or gases are studied, such as pumps, valves, hoses, etc.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
ICT INFORMATION AND COMMUNICATION TECHNOLOGY

Courses

ICT.110 Computer Software Applications

This course in software applications will provide students with an overview of a computer operating system and commonly used computer software. Students will gain experience with word processing and database management tasks, presentation software, and spreadsheets. Additional software programs associated with the Windows environment will be explored. This course may be used to satisfy the computer requirement common for students planning to transfer to a four-year college or university.

Offered: Fall or Spring or Summer
Prerequisites: AOP.101 or or BOC.107 or appropriate articulated high school credit.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ICT.115 Website Support

Today’s businesses understand the value and importance of a company website, although many do not understand the factors which contribute to its success. Students will be introduced to determining the best way to keep the content and design of a company website up-to-date. Students will explore various strategies that can simplify and streamline what has been called the most difficult task in web development-maintenance. Students will be exposed to proper procedures for text, images, and hyperlinks that are suitable for professional purposes.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

ICT.120 Computer Information Systems

This course is an overview of computer information systems. It is designed for the student majoring in computer information systems or various business curricula. The course may be used to fulfill the introductory course requirement in the Computer Information Systems Specialist A.A.S. degree or to meet the introductory computing course requirements for business majors at four-year colleges or universities. Computer concepts, terminology, hardware, software, operating systems, networks and career preparation topics are surveyed and discussed.

Offered: Fall or as Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

ICT.131 Fundamentals of Programming

This course introduces a disciplined approach to problem-solving and algorithm development, and the use of various software planning and development tools necessary for the efficient solution of problems requiring computer programmed solutions. The topics of selection, repetition and sequence control structures and program design, testing and documentation using good programming style are covered in this course. This course will also introduce the C programming language. Emphasis is on high-level block-structure including: syntax, operators, data types, program control, pointers, arrays, I/O and disk file processing, parameters and libraries. Students will focus on analyzing, coding, compiling and debugging programs which are developed using modular and structured programming techniques. In addition to procedural methods students will also be introduced to data abstraction concepts.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring

ICT.135 Mobile Technologies

This course will expose students to emerging technologies, issues, and concepts in wireless and mobile networks. A variety of technologies will be studied on how they exist and function. Technologies may vary each time this course is offered as this type of technology is rapidly changing.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

ICT.160 Introduction to Internetworking

This is the first of four courses providing students with classroom and laboratory experience in networking technologies that will provide them with entry-level skills in computer networking. Course content includes, but is not limited to, safety practices, networking, network terminology and protocols, network standards, working with LANs and WANs, understanding the OSI model, cabling and use of cabling tools, working with routers and doing router programming, network topologies (primarily the star topology) and IP addressing. Emphasis is given to decision-making and problem-solving techniques in applying scientific, mathematical, communication and social studies skills and concepts to network problems. Instruction and training is also provided in the proper care, maintenance and use of networking software, tools and equipment as well as the consideration of local, state and federal safety, building and environmental codes and regulations.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not Applicable

General Education – Not Applicable
IC.T.165 LINUX 1  2  2  3

This course aligns to the Linux Professional Institute (LPI) Linux Essentials Professional Development Certificate (PDC), an entry level credential. Linux adoption continues to rise worldwide. This course provides the foundational skills for working in Linux open source technologies environment.

Offered: Fall
Prerequisites: ICT.181
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGE, and Certificate where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.170 Hardware Installation & Maintenance  2  2  3

This course covers the basic hardware of a microcomputer. Topics include component identification, memory systems, internal and external component installation and configuration, preventive maintenance, procedures, upgrading, documentation procedures, diagnosis and troubleshooting, and basic component repair. Upon completion of the course, students should be able to select appropriate microcomputer equipment, upgrade and maintain existing equipment, and diagnose non-functional components.

Offered: Fall
Prerequisites: ICT.181 previous or concurrent enrollment.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.181 Windows Networking & Operating Systems  2  2  3

This course is for individuals who are new to Microsoft Windows and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows Server products. This course will help the student prepare for the Microsoft Certified Technology Specialist Examination.

Offered: Fall
Prerequisites: Take ICT.181
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.182 Implement Ms Network Infrastructure  2  2  3

This course is for support professionals who are new to Microsoft Windows and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses the Microsoft Windows Server products. This course will help the student prepare for the Microsoft Certified Technology Specialist Examination.

Offered: Spring
Prerequisites: Take ICT.181
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.184 Managing Ms Windows Network Servers  2  2  3

This course provides the foundational skills for working in Linux open source technologies environment.

Offered: Fall
Prerequisites: ICT.180 or have consent of Instructor.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.190 Presentation Graphics & Multimedia  2  2  3

This course is designed for the student to explore the capabilities of presentation graphics programs and multimedia presentation options. Audio, video and screen casting programs will be explored.

Offered: As Needed
Prerequisites: ICT.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

IC.T.205 Visual Basic Programming  2  2  3

This course uses Visual BASIC in the Windows environment. It introduces event-driven computer programming to develop graphical user interfaces in an object-oriented environment. Topics include input/output operations, sequence, interaction, arithmetic operations, array, forms sequential files and other related topics.

Offered: Spring
Prerequisites: ICT.130 prior to or concurrently.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable
ICT.210 Advanced Microcomputer Software Application  2  2  3

In this course—designed as a continuation of ICT.110—students will be empowered and encouraged to develop advanced skills in the use of word processing, spreadsheet, database, presentation, and other software programs as they apply to the Windows environment.
Offered: Spring
Prerequisites: ICT.110;
Applicable toward graduation at Sandburg where program structure permits: Degree or Certification: AAS, AGS, and Certificates were applicable. General Education: Not applicable.
General Education – Not Applicable

ICT.212 Microcomputer Spreadsheet App2  2  2  3

In this course students will apply the concepts learned in ICT 112 to realistic business problems. Advanced spreadsheet concepts will be covered, including formatting techniques, templates, functions, lists, filters, analysis tools, workgroups, and the process for importing and exporting data.
Offered: As Needed
Prerequisites: ICT.112
Applicable toward graduation at Sandburg where program structure permits: Degrees and Certifications: AAS, AGS, and Certificates were applicable. General Education: Not applicable.
General Education – Not Applicable

ICT.214 Microcomputer Database Applications  2  2  3

This course is a continuation of ICT 114. Students will explore the database operations needed to create and update files; order and search files; generate reports and labels; use memory variables for more complex data manipulation; and produce custom input and output forms.
Offered: Spring
Prerequisites: ICT.114
Applicable toward graduation at Sandburg where program structure permits: Degree and Certification: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

ICT.220 Digital Forensic & Ethical Principle  2  2  3

This course covers the fundamental concepts of examining, investigating, retrieving, analyzing, and presenting digital evidence as it relates to both civil and criminal investigations. Participants will learn how to use various forensic tools to retrieve digital evidence from a crime scene, analyze data, and present the evidence to comply with the legal process in an ethical manner. IAI Course No.: Offered: Spring
Prerequisites: ICT 181
Offered: Spring
Prerequisites: Take ICT.181;
Applicable toward graduation at CSC where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only
Offered: Spring
Prerequisites: Take ICT.181;
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring Prerequisite: ICT 181.
General Education – Not Applicable

ICT.226 Sql Database Application  3  2  4

This course is designed to teach the use of Structured Query Language (SQL) to construct, modify and maintain relational databases. Emphasis is on SQL and its uses in business applications. Hierarchical, network and relational models are covered. Additional topics include data redundancy, data independence, security and data integrity.
Offered: Spring
Prerequisites: Take ICT.120
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring Prerequisite: ICT 120.
General Education – Not Applicable

ICT.251 Ethical Hacking & Networking Defense  3  3

Hands-on Ethical Hacking and Network Defense introduces the art of ethical hacking and security testing and prepares students to be efficient security professionals. This course covers the tools and techniques that ethical hackers and security testers use to discover vulnerabilities and offers solutions to protect computer networks. In addition to learning fundamental security testing concepts, students gain practical knowledge in computer programming in documentation of security tests and in ethical and legal ramifications and discover that critical thinking skills and creativity are essential in security testing.
Offered: Spring
Prerequisites: Take ICT.181
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring Prerequisite: ICT 181.
General Education – Not Applicable

ICT.255 Security + Fundamentals  2  2  3

In this course, we will take an in-depth look at network security concepts and techniques, including basic security principles, establishing security baselines, and the most recent attack and defense techniques and technologies. We will learn how to harden a network to resist attacks, protect basic and advanced communications, and use cryptography and Public Key Infrastructure (PKI) to thwart attacks. We will also discuss establishing security policies and procedures and managing security efforts to prepare students.
Offered: Fall
Prerequisites: Take ICT.181
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates were applicable. General Education: Not applicable.
General Education – Not Applicable
ICT.260 Introduction to Internetwork Operating S 2 2 3

This is the second of four courses providing students with classroom and laboratory experience in current and emerging networking technology that will provide them with entry-level skills in computer networking. Course content includes, but is not limited to, safety practices, networking terminology and protocols, network standards, working with LANs and WANs, additional discussion of the OSI model, discussion of Ethernet, token ring, Fiber Distributed Data Interface, TCP/IP addressing protocol, dynamic routing, and the network administrator’s role and function. Emphasis is given to the use of decision-making and problem-solving techniques in applying scientific mathematical, communication and social studies skills and concepts to solve networking problems. Instruction and training are also provided in the proper care, maintenance and use of networking software, tools, and equipment as well as the consideration of local state and federal safety, building and environmental codes and regulations.

Offered: Fall
Prerequisites: ICT.160
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable. IAI Course No.: Offered: Fall.
General Education – Not Applicable

ICT.261 Introduction to Local Area Networks 1 4 3

This is the third of four semester courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment and/or further education and training in the computer networking field. Instruction includes, but is not limited to, safety, networking, network terminology and protocols, LAN segmentation, IPX addressing, and Fast Ethernet standards. Particular emphasis is given to the use of IPX access lists, full and half duplex Interior Gateway Routing Protocol and Virtual Local Area Networks. Application toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not Applicable. IAI Course No.: Offered: Fall.
General Education – Not Applicable

ICT.262 Introduction to Wide Area Networks 2 2 3

This is the fourth of four courses designed to provide students with classroom and laboratory experience in current and emerging networking technology that will empower them to enter employment and/or further education and training in the computer networking field. Instruction includes, but is not limited to, Network Connectivity including WAN terminology and protocols, WAN services such as frame relay, and high-level data link control, ATM, Ethernet WAN, MPLS, VSAT, point to point protocol, and PPPoE. Emphasis will also be given to the use of VPNs, GRE, eBGP, IPv4 and IPv6 Access Control Lists and Network Security and Monitoring. Students will also explore QoS Mechanisms, Network Evolution to the Internet of Things including Cloud and Virtualization and Network Programming.

Offered: Fall
Prerequisites: ICT.261
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable. IAI Course No.: Offered: Fall.
General Education – Not Applicable

ICT.265 Linux 2 2 3

This course is the second course in the Linux series. This course aligns to both the LPIC Level 1 certification and CompTIA Linux+ certification. Students will be prepared to be Linux administrators, managing, configuring and securing the Linux operating system and network. Application toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificate where applicable. General education: Not applicable.
General Education – Not Applicable

ICT.270 Cisco Security 2 2 3

This course provides an introduction to the core security concepts and skills needed for the installation, troubleshooting, and monitoring of network devices to maintain the integrity, confidentiality, and availability of data and devices. Offered: Spring
Prerequisites: ICT.260 or have CCNA Certification.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not applicable.
General Education – Not Applicable

ICT.276 Virtualization 2 2 3

This hands-on training course explores installation, configuration, and management of a virtualized networking environment. Latest virtualization technologies and software will be used and will align to the current entry-level certification exam.
Offered: Spring
Prerequisites: Take ICT.183
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring.
General Education – Not Applicable Elective Only

ICT.278 IoT Fundamentals 2 2 3

Cisco Networking Academy’s IoT Fundamentals curriculum provides students with a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate the students in applying creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, networking, security, data analytics and business. The student-centric approach translates into the student being able to ideate, design, prototype and present an IoT solution for an identified business or society need. Using this interdisciplinary approach, the IoT Fundamentals curriculum aims to equip students with a Global Problem Solver mindset and skillset, and to fuel their imagination through a deeper understanding of the transformative impact IoT, Big Data, and analytics technologies are having on business and our ability to solve social issues.
Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring.
General Education – Not Applicable Elective Only
**ICT.280 Cybersecurity Operations**  
2 2 3

Cybersecurity Operations (Cyber Ops) introduces the core security concepts and skills needed to monitor, detect, analyze and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations. It emphasizes the practical application of the skills needed to maintain and ensure security operational readiness of secure networked systems.  
Offered: Spring  
Prerequisites: Take ICT.160, ICT.165, ICT.181  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring.  
General Education – Not Applicable Elective Only

**ICT.282 Cloud Security**  
2 2 3

This course covers fundamental concepts of the field of Cloud Computing, cloud security, addressing known risks and vulnerabilities and focuses on sound architectural design for secure cloud environment. The course directed at four major areas: cloud infrastructures, cloud security, cloud platforms, and cloud management. Students will gain hands-on experience through projects utilizing public cloud infrastructures.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring.  
General Education – Not Applicable Elective Only

**ICT.284 I.T Risk Management, Policy & Compliance**  
2 2 3

The course explores concepts of information technology risk management strategies in security perspectives. It will teach students both qualitative and quantitative risk assessment methodologies to identify, mitigate, and manage IT risks. In addition, students will learn about compliance with IT risk management policies and procedures. The course also emphasizes the needs of Contingency Planning, Incident Response, Disaster Recovery and Business Continuity planning  
Offered: Spring  
Prerequisites: Take ICT.255  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable General Education: Not Applicable, Elective Only IAI Course No.: Offered: Spring.  
General Education – Not Applicable Elective Only

**ICT.296 Internship**  
15 3

This course is a planned and supervised occupational work experience at selected work sites using microcomputer systems. Job tasks are organized to include those of a beginning, intermediate and advanced nature so as to provide exposure to the total operation of a microcomputer-based data processing/information system.  
Offered: Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable General Education: Not applicable IAI Course No.: Offered: Spring or Summer.  
General Education – Not Applicable
INS INTERNATIONAL STUDIES

Courses

**INS.100 Introduction to International Studies** 2 2
This course will enrich students with cultural knowledge and will enhance their abilities to see the world from a global perspective. It will introduce students to the culture, history, geography, politics and common linguistic phrases of the countries for which the College offers linguistic study and/or study abroad opportunities.
Offered: Fall
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable.
General Education – Not Applicable

**INS.155 Latin Amer Civ & Culture** 3 3
A survey of the history and cultures of Latin America with an emphasis on a particular country of interest where students will be traveling abroad. Topics covered will include the geography and environment, history, economy, art, literature and culture. Hands-on experience will be required. This course is taught overseas as part of the ICISP International Studies Program.
Offered: Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS AGS and Certificates where applicable.
General Education – Not Applicable

**INS.299 Topics in International Studies** 3 3
This course is available to Sandburg students desiring to take a course not offered at the College while studying abroad for a summer or semester program. Students must register the course with the Admissions and Records Office. The course description title entered on the registration and transcript will reflect the topic of the course, and the grade received abroad will be submitted to that office upon completion of the course.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AGS, AAS, and Certificates where applicable.
General Education – Not Applicable Elective Only
### ISP INDEPENDENT STUDIES

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<tr>
<th>Hr/Wk</th>
<th>Hr/Wk</th>
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<tr>
<td>Lect/</td>
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<td>Cr</td>
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<tr>
<td>Disc</td>
<td>Lab</td>
<td>Hr</td>
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#### Courses

**ISP.199 Independent Study Project**

This course is intended for the student who has satisfactorily completed all, or most of, the course work in a specific baccalaureate oriented subject area (botany, zoology, ceramics, etc.) which is available at CSC and desires to develop a special project for further learning in that subject area. Also, it is appropriate for the pursuit of an independent study project which provides the student an opportunity to apply previously learned principles to a related area for which there are no courses available at CSC. The identification of the project, determination of nature of result(s) to be achieved, design of problem solving approach, nature of report or finished product and commitment for supervision must be worked out between the student and a particular faculty member. The project proposal is then subject to approval by the appropriate Dean and the Vice President of Instruction. If the proposal is approved, the student then must register for the course in the Admissions and Records Office. The course description title entered on the registration and transcript will reflect the topic of that particular study project. A student may earn a maximum of four semester hours of credit in ISP 199.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
### KIN KINESIOLOGY & EXERCISE

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<tr>
<th>Courses</th>
<th>Hr/Wk</th>
<th>Hr/Wk</th>
<th>Sem</th>
<th>Lect/ Clin</th>
<th>Cr</th>
<th>Disc</th>
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**KIN.105 Aerobics**

Any student may enroll in this physical education activity course although it is recommended that anyone over 35 years of age obtain a physical examination from a physician first. Emphasis is on cardiovascular endurance and the development of muscle tone and flexibility. The method of instruction will include step aerobic routines. This course may be repeated by a student for a maximum of two semester hours of credit. The length of each course is eight weeks. Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**KIN.106 Muscle Conditioning**

This course may be repeated by a student for a maximum of two semester hours of credit. This activity is designed to strengthen, tone, and stretch the major muscle groups while improving flexibility and range of motion. Exercises utilizing light weights and resistance bands will be performed to music. The length of the course is eight weeks. It is recommended that anyone over 35 years of age obtain a physical examination from a physician.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**KIN.107 Zumba 1**

Zumba is a high-energy program with motivational music and dance moves from Salsa, Merengue, other Latin steps and free-form styles. It integrates some of the basic principles of aerobic, resistance, and interval training to tone and sculpt the body, burn fat, maximize caloric output, and benefit heart and mind. Students need to wear low tread shoes or dance shoes.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable Elective Only

**KIN.108 Pilates 1**

Students participate in a series of stretching and strengthening exercises based on the Joseph Pilates (pil-LAH-teez) method of body conditioning. Pilates is a method of body conditioning that strengthens and tones muscles, improves posture, provides flexibility and balance, unites body and mind, and creates a more stream lined shape. A variety of equipment may be used including small ball, big ball, body bar, bands, and weights. This is a mat course, machines are not used.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable Elective Only

**KIN.115 Introduction to Leisure Services**

This course examines the purpose and function of leisure services delivered by governmental, non-profit, and private agencies. This introductory course is a requirement for the associate's degree for transfer to the Recreation, Park and Tourism program at Western Illinois University. Assignments, projects and learning experiences are designed to give students an in-depth and comprehensive understanding of leisure; the infrastructures that have developed to provide leisure opportunities for the widest possible range of people; and expose students to the variety of careers in leisure services.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Elective Only

**KIN.130 Personal Training I: Exercise Physiology**

This course provides an overview of seven physiological systems of the human body and the impact of exercise on these systems. It also provides standards for the development of exercise and fitness programs in relationship to the physiological adaptations of the human body, the principles and concepts of human movement, nutritional guidelines for optimum performance, and consideration of physical (age, gender, health, size) characteristics of individuals and environmental conditions. Designed for students who plan to take the certification test from the American Council on Exercise to be a certified personal fitness trainer.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Elective Only Non Course

**KIN.131 Personal Training II: Personal Fitness**

Provides the academic and practical experience that will enable students to design personalized fitness training solutions for clients based on physical, health, and behavioral assessments and employing the American Council for Exercise (ACE) Integrated Fitness Model Components and Phases. Designed for students who plan to take the certification test from the American Council on Exercise (ACE) to be a certified personal fitness trainer.

Offered: Fall or Spring

Prerequisites: Take KIN.130 with a minimum grade of C

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable.

General Education – Elective Only Non Course
**KIN.132 Personal Training III: Fitness Assessment**  
1  2  2  
Provides an overview of the five functional assessments as well as the physiological assessments that are necessary for the development of personalized fitness programming for clients under the American Council on Exercise (ACE) Integrated Fitness Model. Provides information on the legal and business principles for practicing personal trainers. Designed for students who plan to take the certification test from the American Council on Exercise to be a certified personal fitness trainer. 
Offered: Fall or Spring 
Prerequisites: Take KIN.131 with a minimum grade C; Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable. General Education – Elective Only Non Course

**KIN.133 Personal Train IV: Practicum**  
2  1  
The objective of the practicum is to integrate classroom theory and skill practice in a fitness center environment where the student can practice under the supervision of a personal fitness trainer. The student will be supervised in conducting assessments and developing and initiating fitness programs employing the American Council on Exercise (ACE) Integrated Fitness Model. This is the final course for students who plan to take the certification test from the American Council on Exercise (ACE) to be a certified personal trainer. 
Offered: Fall or Spring 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable. General Education – Elective Only Non Course

**KIN.140 Physical Fitness 1**  
2  1  
This physical education activity course is open to all students. It is designed as an open lab to accommodate each student’s needs. Emphasis is placed in three areas of physical fitness, strength, flexibility and cardiovascular endurance. Universal equipment and cardiovascular equipment will be used to develop more effectively one’s level of physical fitness. This course may be repeated for credit one time. Note: In any one academic term, a student may not enroll in more than one KIN course which requires the use of the Fitness Center. 
Offered: Fall 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**KIN.141 Physical Fitness 2**  
2  1  
This physical education activity course parallels PED 140 and is open to all students. Emphasis is placed in three areas of physical fitness: strength, flexibility and cardiovascular endurance. Universal equipment and cardiovascular equipment will be used to develop more effectively one’s level of physical fitness. This course may be repeated for credit one time. Note: In any one academic term, a student may not enroll in more than one KIN course which requires the use of the Fitness Center. 
Offered: Spring 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**KIN.142 Physical Fitness 3**  
2  1  
This physical education activity course parallels PED 140 and is open to all students. Emphasis is placed in three areas of physical fitness, strength, flexibility and cardiovascular endurance. Universal equipment and cardiovascular equipment will be used to develop more effectively one’s level of physical fitness. This course may be repeated for credit one time. Note: In any one academic term, a student may not enroll in more than one KIN course which requires the use of the Fitness Center. 
Offered: Fall 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**KIN.143 Physical Fitness 4**  
2  1  
This physical education activity course parallels PED 140 and is open to all students. Emphasis is placed in three areas of physical fitness: strength, flexibility and cardiovascular endurance. Universal equipment and cardiovascular equipment will be used to develop more effectively one’s level of physical fitness. This course may be repeated for credit one time. Note: In any one academic term, a student may not enroll in more than one KIN course which requires the use of the Fitness Center. 
Offered: Spring 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**KIN.145 Physical Fitness 5**  
1  0.5  
This physical education activity course parallels PED 140 and is open to all students. Emphasis is placed in three areas of physical fitness, strength, flexibility and cardiovascular endurance. Universal equipment and cardiovascular equipment will be used to develop more effectively one’s level of physical fitness. This course may be repeated for credit one time. Note: In any one academic term, a student may not enroll in more than one KIN course which requires the use of the Fitness Center. 
Offered: Fall or Spring or Summer 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**KIN.200 Foundations of Physical Education**  
3  3  
This course is a study of the development of physical education programs in K-12 schools. The student will also learn about the possibilities of professional opportunities in the area of physical education and the role of sports in non-school (recreational) settings. Internet assignments will be required. 
Offered: Fall or Spring 
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only
**KIN.202 Sports in Society**  
In this course students will study current sports-related controversies and issues from a global perspective. The role of various sports and their historical influence on American society will be emphasized. Included will be the study of the effects of related social factors such as gender, race, sexuality, nationalism, and media on the evolution of the sports culture. 
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**KIN.220 Coaching Basketball**  
This course presents the theory and techniques of coaching basketball. It is open to interested students regardless of their vocational plans. The student is provided an opportunity to develop a personal approach to coaching and teaching techniques. Topics include offensive/defensive strategies, teaching specific skills, motivational techniques, and general management skills needed by basketball coaches.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**KIN.230 Sports Officiating**  
This course is designed to assist students in interpreting the rules and regulations of the National Federation of State High School Athletic Association. The opportunity to learn and practice proper officiating mechanics is also provided through actual participation. Sports especially emphasized in the course are basketball and volleyball.
Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**KIN.260 Coaching Principles & Sports First Aid**  
Students enrolled in this course will study the general principles underlying the profession of coaching athletic teams and individual athletes. This course will address the essential elements of successful coaching from proven coaching techniques to effective risk management. Students will also be taught how to be safe, capable, and effective as first responders to injured athletes. Students will have the opportunity to earn certification through the American Sport Education Program. Internet assignments may be required.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

**KIN.280 Athletic Injuries**  
This is an introductory course in the study of sports medicine. Included are topics which address the treatment and rehabilitation of athletic injuries, human and environmental factors in sport injury, accident prevention and injury control, and safety factors in sport activities. Students will also study the operation, maintenance, and administration of a typical athletic training room.
Offered: Spring or as Needed
Prerequisites: KIN.200, KIN.260 and HTH.130; BIO.111 is a recommended preparatory course
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only
MAT MATHEMATICS

Courses

**MAT.080 Basic Mathematics W/Geometry**

This course is designed for the student who is in need of proficiency in basic arithmetic processes with integrated geometry. Topics to be covered in this course include: basic operations and problem solving with whole numbers, fractions, and decimals; ratio, rate and proportion; percent; geometry and measurement; statistics real number system; and basic algebraic concepts. This course will require the use of an online computer assisted program both in and outside of class time.

Offered: Fall, Spring & Summer

Prerequisites: Take MAT.080 with a minimum grade of C or better.

Applicable toward graduation at CSC where program structure permits: Not Applicable

General Education – Not Applicable

**MAT.083 Beginning Algebra W Geometry**

This course is designed as an introductory algebra course with integrated geometry. Topics to be covered in this course include: real number system; simplifying and evaluating algebraic expressions; solving linear equations and inequalities; graphing linear equations and inequalities; solving systems of linear equations; introduction to function; exponents; roots; polynomials; and factoring techniques. This course will require the use of an online computer assisted program both in and outside of class time.

Offered: Fall or Spring or Summer

Prerequisites: The appropriate placement exam score and a high school diploma or equivalent.

Applicable toward graduation at Sandburg where program structure permits: Not applicable.

General Education – Not Applicable

**MAT.085 College Math Fundamentals**

This is a preparatory course to equip students for college-level general education mathematics and statistics courses. The content of the course is relevant for non-STEM majors. Topics in this course incorporate real-life applications while teaching fractions, decimals, percent; algebraic concepts; geometry & measurement; and an introduction to probability and statistics. IAI Course No.: N/A

Offered: Fall, Spring & Summer

Prerequisites: Take MAT.080 with a minimum grade of C or better.

Applicable toward graduation at CSC where program structure permits: Degree or Certificate: N/A General Education: N/A.

General Education – Not Applicable

**MAT.086 Math Literacy**

Math Literacy is a preparatory course for college-level general education mathematics and statistics courses that includes content that is relevant for non-STEM majors. Topics in this course are presented in context and focus on numeracy, functions, and modeling. In addition to algebra topics, this course promotes data literacy and incorporates reading, writing and technology. Students will be required to participate in group work and use an online computer assisted program outside of classroom time.

Offered: Fall or Spring or Summer

Prerequisites: The appropriate placement exam score or MAT.080 or MAT.090 with a grade of C or better is required to enroll in this course.

Applicable toward graduation at Sandburg where program structure permits: Not applicable.

General Education – Not Applicable

**MAT.089 Concepts of Math Fundamentals**

This course is to be taken concurrently with MAT.109. Math skills which are necessary for a student to successfully complete the general education math course will be covered. Emphasis will be on number theory and estimation; basic operations; ratios, proportions, and percent; geometric and measurement concepts; algebraic expressions, equations, and formulas; and study skills for math. Other topics may be visited, as needed, to be successful in a liberal arts math course.

Offered: Fall, Spring & Summer

Prerequisites: The appropriate placement exam scores or MAT.080 with a grade of C or better.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: N/A General Education: N/A.

General Education – Not Applicable

**MAT.096 Arithmetic Fundamentals**

This is a basic foundation course in computational mathematics offered for students whose current skills in elementary arithmetic need improvement. The specific topics included are fractions and decimals, percentages, proportions, and ratios; metric and English measurements, and the fundamentals of integer arithmetic and elementary algebraic operations. This course serves as a basis for students who plan to study business mathematics, algebra, or technical mathematics. This course may be repeated three times (four total) by students needing additional help. This course is recommended for students who score below 12.9 on the numerical skills section of the TABE test. Student is required to have a High School Diploma or GED equivalency.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: Not Applicable.

General Education – Not Applicable

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<th>Course</th>
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**MAT.098 Gen Ed Preparatory Math**

This course is an alternate to MAT.099 Intermediate Algebra for students who are non-STEM (Science Technology Engineering and Math) majors who plan to take MAT 109 Concepts of Math and/or MAT 110 Statistics. The course focuses on problem solving, critical thinking, and data analysis. Linear equations, quadratics, functions, basic exponents and factoring will be included with modeling and some basic probability and statistics. Group work and projects may be part of the course. The use of technology will be encouraged.

Offered: Fall or Spring
Prerequisites: Appropriate placement exam score or MAT.083 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**MAT.099 Intermediate Algebra**

This course builds upon a student's early preparation in algebra to provide those skills needed in further study of mathematics, science, or related fields. Topics include the study of the properties of the real number system, polynomials, rational expressions, first-degree equations and inequalities, exponents and radicals, quadratic equations, graphs, functions, systems of linear equations, and logarithms.

Offered: Fall or Spring or Summer
Prerequisites: One year of high school algebra and one year of high school geometry with grades of C or better; or the appropriate placement exam score; or take MAT.086 with a grade of C or better; or MAT.098 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Math AGS Only

**MAT.101 Technical Mathematics 1**

This course is designed to serve students enrolled in vocational or technical programs. The emphasis is on skill-building and the applications of mathematics. Topics studied include a review of arithmetic, measurement, approximations, basic algebra, applied geometry, and right triangle trigonometry. Scientific calculators are used and are required of students.

Offered: Fall
Prerequisites: Appropriate placement exam score or MAT.080 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Math AGS Only

**MAT.102 Technical Mathematics 2**

This course is a continuation of MAT 101. Topics include linear functions and graphs, laws of sines and cosines, systems of linear equation, exponents and radicals, complex numbers, quadratic equations, logarithms, and other topics from trigonometry. The emphasis is on skill-building and applications of mathematics. A scientific calculator is needed.

Offered: Fall or Spring
Prerequisites: MAT.101
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Math

**MAT.109 Concepts of Mathematics**

This course is designed to fulfill general education requirements. In the development of topics, the focus shall be on mathematical reasoning and the solving of real-life problems. Calculators and computers will be used regularly. The units studied include probability and counting techniques, logic and set theory, the mathematics of finance, and statistics. Included in the approach to these topics shall be the use of mathematical models and group projects.

Offered: Fall or Spring or Summer
Prerequisites: Two years of high school algebra and one year of high school geometry with grades of C or better; or an ACT Math score of 25; or a score of 4 or 5 on the PARCC exam; or the appropriate placement exam score; or take MAT.086 with a grade of C or better; or MAT.098 with a grade of C or better; or MAT.099 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Math

**MAT.110 General Education Statistics**

Using simulations and data collection, students will learn how to organize and interpret data. Real-life examples will serve as the focus as students develop mathematical reasoning skills and the ability to read and interpret statistical reports. Calculators and computers will be used extensively. Topics include descriptive statistics (graphs, averages, variability), elementary probability theory, probability distributions, hypothesis testing of a single parameter, and correlation and linear regression.

Offered: Spring or Summer
Prerequisites: Two years of high school algebra and one year of high school geometry with grades of C or better; or an ACT Math score of 25; or a score of 4 or 5 on the PARCC exam; or appropriate placement exam score; or take MAT.086 with a grade of C or better or MAT.098 with a grade of C or better or MAT.099 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Math

IAI Course No. M1 904
**MAT.130 College Algebra**  
This pre-calculus course is appropriate for students whose major interest is in mathematics, science, engineering, or other disciplines requiring a strong preparation in mathematics. The content of this course includes real number properties, linear equations and inequalities, the algebra of functions, exponents, logarithms, systems of linear equations, and sequences and series. Students intending to enter the calculus sequence (MAT 240-242) should also enroll in MAT 140 (Trigonometry). 
Offered: Fall or Spring or Summer  
Prerequisites: Take MAT.099 with a grade of C or better  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education -- Not Applicable Elective Only

**MAT.131 Finite Mathematics**  
This course is designed for students intending to pursue a baccalaureate degree in an area of business or the social sciences. Topics include the study of the mathematics of finance, matrices, systems of linear equations and inequalities, linear programming, combinations, probability, and Markov Chains. 
Offered: Fall or Summer  
Prerequisites: MAT.130 with a grade of C or better  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. M1 906  
General Education -- Math

**MAT.135 Calculus for Business Or Social Sciences**  
In this course the major ideas of calculus - differentiation and integration - are developed in an intuitive manner. The emphasis is on skill building and on applications of calculus to the areas of business, economics, and social science. The types of functions studied include polynomials, rational, exponential, and logarithmic. Multivariable content includes applications of partial derivatives. (Not open to students who have credit for MAT 240.)  
Offered: Spring or Summer  
Prerequisites: Take MAT.130; Minimum grade C  
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable General Education: Mathematics IAI Course No.: M1 900-B  
Offered: Spring or Summer.  
IAI Course No. M1 900  
General Education – Math

**MAT.140 Trigonometry**  
This pre-calculus course is designed for students whose primary interest is in mathematics, science, or engineering. Students intending to complete the calculus sequence (MAT 240-242) should also enroll in MAT 130. Topics included are in-depth study of trigonometry functions, graphs, identities, trigonometric equations, oblique triangles, complex numbers, and DeMoivre's Theorem.  
Offered: Fall  
Prerequisites: MAT.130 with a grade of C or better or concurrent enrollment  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**MAT.210 Statistics**  
This course is appropriate for those pursuing careers in the social or natural sciences or in business. Included are units on descriptive statistics, probability theory, random samples, hypothesis testing, regression and correlation, chi-square tests, and an introduction to ANOVA. 
Offered: Spring or Summer  
Prerequisites: MAT.130 with a grade of C or better  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. M1 902  
General Education – Math

**MAT.240 Calculus With Analytic Geometry 1**  
The calculus sequence is intended for those students whose major interest is in mathematics, engineering, or the physical sciences. Major topics covered include a review of lines and functions, limits, the derivative, applications of differentiation, the definite integral, and selected topics from analytic geometry. 
Offered: Spring  
Prerequisites: MAT.130 and MAT.140, with a grade of C or better in each. 
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. M1 900-1  
General Education – Math

**MAT.241 Calculus With Analytic Geometry 2**  
This course is a continuation of MAT 240. Topics covered include applications and techniques of integration, inverse trigonometric functions, improper integrals, polar coordinates, parametric equations, conic sections, infinite series, and Taylor series. Additional topics from analytic geometry may be included. 
Offered: Fall  
Prerequisites: MAT.240 with a grade of C or better.  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. M1 900-2  
General Education – Math
**MAT.242 Calculus With Analytic Geometry 3**  
4 4

This course is a continuation of MAT 241. Topics covered include vectors in 2-space and 3-space, vector-valued functions, partial derivatives and applications, and applications involving multiple variable integration. 
Offered: Spring 
Prerequisites: MAT.241 with a grade of C or better 
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. **IAI Course No. M1 900-3** 
General Education – Math

**MAT.260 Differential Equations**  
3 3

This course is suitable for students pursuing a career in engineering, physical science, or mathematics. Included are these topics involving solutions to ordinary differential equations: first and second order equations; linear equations; systems of linear equations; LaPlace transforms; applications; numerical approximations. 
Offered: As Needed 
Prerequisites: MAT.242 with a grade of C or better 
Applicable toward graduation at Sandburg where program structure permits: 
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. 
General Education – Not Applicable Elective Only
MDA MEDICAL ASSISTING

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<td>MDA.101</td>
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MDA.100 Fundamentals of Medical Assisting

This course introduces the student to the professional role and responsibilities of a medical assistant. Emphasis is placed on communication skills and interpersonal relationships in the clinical environment. Legal and ethical considerations are also covered as they relate to medical practice. Special attention is given to issues associated with patient privacy and confidentiality, including a review of HIPAA regulations.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MDA.101 Intro to Management of Medical Office

This course will provide an introduction to the administrative responsibilities associated with management of a medical office. Students will be exposed to issues relevant to personnel, office policies and procedures, conflict resolution, and customer service.

Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MDA.110 Adm Procedures in Medical Assisting

In this course Medical Assisting students are instructed in the performance of clerical and administrative office procedures. Verbal and written communication skills will be stressed as students study patient reception techniques, appointment scheduling, and medical record management.

Offered: Fall or Spring
Prerequisites: BOC.107
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AGS and Certificates where applicable.
General Education – Not Applicable

MDA.112 Pharmacology & Medication Administration

This course provides the cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies of medication administration typically performed by medical assistants; and introduces the student to the principles of pharmacology: classifications of medications, indications for use, desired effects, side effects, and adverse reactions of commonly prescribed drugs. The student will learn the professional role and legal responsibilities of the medical assistant in administration of medication. The student will learn abbreviations and symbols used in calculating medication dosages, systems of measurement, how to convert among measurement systems, how to calculate medication dosages, guidelines for preparation and administration of medication, routes of administration, and techniques of administration. This course is composed of 24 theory hours and 16 laboratory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree General Education: Not Applicable.
General Education – Not Applicable

MDA.114 Administrative Procedures I

This course is the first part of the administrative component of the Medical Assistant’s cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies that introduces the student to the professional role and responsibilities of a medical assistant within the health care system. Emphasis on verbal and written communication skills and interpersonal relationships will take place as the students learn to perform the following administrative procedures: reception techniques, telephone techniques, medical office computerization, scheduling appointments, and medical record management utilizing a simulated medical office environment. The student will also learn about legal and ethical issues related to medical practice; medical assistant’s scope of practice; patient privacy and confidentiality; office policies and procedures; and safety and liability considerations as they relate to the operation of a medical office. This course is composed of 40 theory hours and 16 laboratory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree General Education: Not Applicable.
General Education – Not Applicable

MDA.115 Clinical Medical Assisting I

This course will introduce the student to the clinical aspects of a medical office environment. The student will learn how to assist the physician in the general examination and treatment of patients, take vital signs, collect health information, and perform basic screening procedures. The course will cover the principles of infection control, including the use of standard precautions and adherence to OSHA guidelines. Patient education/instruction will also be emphasized.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
MDA.116 Clinical Procedures I

This course introduces the clinical component of the Medical Assistant's cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies of a medical office environment. The student will learn how to assist the physician in the general examination and treatment of patients, take vital signs, collect health information, and perform basic screening procedures. The course will cover the principles of infection control, including the use of standard precautions and adherence to OSHA guidelines, emergency preparedness protection practices, and emergency medical procedures and first aid. Patient education and clinical documentation will also be emphasized. The student will acquire CPR certification healthcare provider level during this course. This course is composed of 32 theory hours and 32 laboratory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree
General Education: Not Applicable.

MDA.120 Financial Procedures in the Medical Office

Students will explore the financial aspects of a medical office and develop an understanding of coding, billing and third-party reimbursement processes. A basic introduction to banking services and office accounting procedures is also included.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MDA.125 Clinical Procedures II

This course is the second part of the clinical component of the Medical Assistant's cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies of a medical office environment. The student will learn how to assist the physician in specialized areas of practice. The student will learn about specialty examinations and procedures. The course will cover principles of sterilization and disinfection, minor office surgery procedures, wounds, sterile dressing changes, and instruments used in minor office surgery. The student will also learn disorders and diseases relevant to each medical specialty or associated body system and introduction to nutrition. This course is composed of 48 theory hours and 32 laboratory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree
General Education: Not Applicable.
General Education – Not Applicable

MDA.127 Clinical Laboratory Procedures

This course provides the cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies of clinical laboratory procedures typically performed by medical assistants. The student will learn about Clinical Laboratory processes; collecting, handling, and transporting specimens; CLIA waived laboratory testing; quality control; and laboratory safety. The student will learn and perform phlebotomy venipunctures and capillary punctures. This course includes an introduction to hematology, blood chemistry and immunology, and medical microbiology. This course is composed of 32 theory hours and 32 laboratory hours.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree
General Education: Not Applicable.

MDA.200 Management of the Medical Office

In this course, students are provided with a basic introduction to the administrative responsibilities associated with managing a medical practice. The development of problem solving skills is emphasized as issues related to personnel, office policies/procedures, and customer service are presented.

Offered: Fall or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MDA.205 Medical Assisting Practicum

This course provides Medical Assisting students with the opportunity to participate in a clinical externship. Under the supervision of a clinical preceptor, students will gain experience in a local medical facility. The course also includes an orientation prior to assignment and a one week review seminar at the completion of the rotation.

Offered: Fall or Summer
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
**MDA.216 Administrative Procedures II**  
This course is the second part of the administrative component of the Medical Assistant's cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies that covers the financial aspects of a medical office and develops an understanding of coding, billing and third party reimbursement processes. A basic introduction to the daily financial activities and office accounting procedures, learning how to compile a patient charge slip, post patient charges, post patient payments, and other banking activities. Emphasis is placed on performing current procedural coding (CPT) codes, and diagnosis coding ICD-9 and ICD-10 CM Manual. Students will be introduced to health insurance, health insurance reimbursement, types of insurance, submitting insurance claim forms, and tracking insurance reimbursement. Students will also learn about billing and collections procedures. This course is composed of 48 theory hours and 32 laboratory hours.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree  
General Education: Not Applicable.  
General Education – Not Applicable

**MDA.220 Medical Assistant Externship**  
This course provides students with the opportunity to participate in a clinical externship. Students will experience 180-240 hours of clinical experience under the supervision of a clinical preceptor. Students will gain experience in a local medical facility allowing practical application of medical assistant principles (knowledge), psychomotor (skills), and affective (behavior) attained throughout the Medical Assistant program. This course also includes an orientation to the medical facility and a medical assistant exam review. The student will be required to take an exit competency exam at completion of the course. This course is composed of 16 theory hours and 180-240 clinical/laboratory hours.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: Medical Assistant Certificate, AAS Degree  
General Education: Not Applicable.  
General Education – Not Applicable
MDC MEDICAL CODING

Courses

MDC.101 Medical Coding Icd

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Students will be introduced to medical coding principles using the most current version of ICD-CM (International Classification of Diseases - Clinical Modification) necessary to arrive at correct coding assignments for both diagnosis and in-patient procedures. Students will take clinical documentation and modify it into an ICD-CM alphanumeric or numeric code. Students will also be introduced to accurate and ethical coding by correct selection of diagnosis following official guidelines of the UHDDS (uniform hospital discharge data set).

Offered: Spring

Prerequisites: MDT.100 with a minimum grade of C or instructor approval.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

MDC.102 Medical Coding Cpt

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This course is intended to introduce the student to the concepts of current procedural coding. Through guided instruction and practical experience, students will learn how to apply and where to locate the guidelines for assigning correct procedural codes to physician documentation. At the end of the course, the student should be able to appropriately code procedure codes to the medical record as well as assign any modifiers using the CPT book and concepts learned.

Offered: Fall

Prerequisites: MDT.100 with a minimum grade of C or instructor approval.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable
**Courses**

**MDT.090 Introduction to Medical Terminology**  
2 2

This course is to assist students to effectively communicate in the field of health care. Students who take this course will become familiar with medical terminology by learning to dissect words in order to determine their meaning. A body systems approach to learning medical language will be used. Word parts will be used to build, analyze, define, and spell medical terms. Structural, directional, disease and disorder, surgical, and diagnostic terms; pronunciations; and abbreviations will be included.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable

**MDT.100 Medical Terminology**  
2 2

This course provides a solid foundation and understanding of the medical language used by healthcare professionals. A systematic, word building approach is used to study medical word parts including prefixes, suffixes, and combining forms. Emphasis placed on word building, definition and use of terms related to all areas of health science, analysis of parts of the word, abbreviations, spelling, and correct pronunciation to enable health care workers to communicate in an accurate, articulate and concise manner. The course includes but is not limited to terms related to anatomy of the human body, functions of health and disease, medical processes and procedures. Students will also become proficient in using a medical dictionary. This course is useful to anyone considering a health care profession. Students entering nursing, emergency medical services - paramedic/EMT, radiologic technology, medical assistant, medical office assistants, medical coders, etc. will find Medical Terminology a great asset to understanding lectures and textbooks, making their learning easier.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable  
General Education – Not Applicable
MET METALLURGY

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<td>MET.100 Metallurgy Fundamentals</td>
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This course provides a study of the fundamental chemical and physical concepts of metallurgy for students preparing for initial or improved employment. Emphasis is placed upon measurement of physical properties, chemical properties, grain size and growth, heat treatment, and mechanical testing.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable

General Education: Not Applicable.

General Education – Not Applicable
Courses

*MFG.100 Introduction to Welding*  
2.5 1 3

This class provides an introduction to welding technology with an emphasis on basic welding laboratory principles and operating procedures. Topics include: safety and health practices, hand tool and power machine use, measurement, laboratory operating procedures, welding power sources, weld simulator practice, investigate welding career potentials, and introduction to welding codes and standards.

Offered: Fall or Spring  
Prerequisites: Appropriate placement exam scores.

Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable

*MFG.125 Industrial Blueprints*  
2 2 3

The student will learn how to read and interpret the different types of standard symbols and abbreviations found on industrial drawings. Students will be provided with instruction that enables them to understand the various types of blueprints, shop prints, and schematics used in an industrial environment. Students will interpret the different types of standard symbols and abbreviations found on electrical construction drawings, schematics and wiring diagrams. This course will benefit students entering any industrial trade.

Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificate where applicable.  
General Education – Not Applicable

*MFG.130 Industrial Safety*  
1.5 .5 2

This course provides the student with specific instruction to facilitate safe work practices in industrial environments. Students will be introduced to different safety philosophies and terminology. Students will also become acquainted with OSHA policy and with the Right-to-Know laws. Also covered are units specific to fire safety, pressurized gases and welding, electrical hazards, and safe machine usage. Students will have the opportunity to earn the OSHA ten-hour safety certification.

Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable
**MLT MEDICAL LAB TECHNICIAN**

### Courses

**MLT.100 Phlebotomy & Clinical Laboratory**  

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2 2 3

This course provides the cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies to competently perform venipuncture and capillary puncture for blood collection purposes and clinical laboratory procedures typically performed by health care professionals. The student will learn about Clinical Laboratory processes; collecting, handling, and transporting specimens; CLIA waived laboratory testing; quality control; and laboratory safety. The student will learn how to safely perform phlebotomy venipunctures and capillary punctures. Topics emphasized include infection control, legal and ethical responsibilities, professionalism, and interpersonal communication skills. This course is composed of 32 theory hours and 32 laboratory hours.

Offered: Fall or Spring or Summer

Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better, or college placement exam with a minimum reading score of 57.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable.

General Education – Not Applicable Elective Only

**MLT.160 Advanced Phlebotomy**  

1.5 1 2

This course provides advanced phlebotomy skills for those students pursuing phlebotomy specific certification, by providing refinement of previous learned skills and advanced techniques for phlebotomy. The student will learn how to manage difficult or complicated blood collection situations by applying learned techniques for various populations: neonate, pediatric, geriatric, and physically or mentally challenged patients. The student will also learn variations in technique and application of collection for specialized hematology testing. Topics emphasized include the role of effective communication with a diverse patient population, special procedure considerations, pre-analytic variables, and the phlebotomist’s role in quality assurance and continuous quality improvement. This course is composed of 24 theory hours and 16 laboratory hours.

General Education – Not Applicable

**MLT.180 Phlebotomy Technician Practicum**  

1 5 2

This course provides students with opportunities to observe, participate, and perform in the functional role of the Phlebotomist in a clinical setting and simulated lab setting. Students are supervised by course instructor or preceptors in a medical office, clinic, or hospital laboratory. The student will participate as a member of the healthcare team. The student will demonstrate safe and effective phlebotomy skills in a clinical setting by performing a minimum of 100 successful venipunctures including specimen collections. The student will demonstrate professionalism, communication techniques, patient teaching, documentation, confidentiality, infection control practices, and compassionate patient care. The student will complete weekly exam review modules to prepare for the certification examination. This course is composed of 16 exam review/theory hours and 80 lab/clinical practicum hours.

General Education – Not Applicable

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**Course Descriptions**

**MLT.100 Phlebotomy & Clinical Laboratory**

This course provides the cognitive (knowledge), psychomotor (skills), and affective (behavior) competencies to competently perform venipuncture and capillary puncture for blood collection purposes and clinical laboratory procedures typically performed by health care professionals. The student will learn about Clinical Laboratory processes; collecting, handling, and transporting specimens; CLIA waived laboratory testing; quality control; and laboratory safety. The student will learn how to safely perform phlebotomy venipunctures and capillary punctures. Topics emphasized include infection control, legal and ethical responsibilities, professionalism, and interpersonal communication skills. This course is composed of 32 theory hours and 32 laboratory hours.

Offered: Fall or Spring or Summer

Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better, or college placement exam with a minimum reading score of 57.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable.

General Education – Not Applicable Elective Only

**MLT.160 Advanced Phlebotomy**

This course provides advanced phlebotomy skills for those students pursuing phlebotomy specific certification, by providing refinement of previous learned skills and advanced techniques for phlebotomy. The student will learn how to manage difficult or complicated blood collection situations by applying learned techniques for various populations: neonate, pediatric, geriatric, and physically or mentally challenged patients. The student will also learn variations in technique and application of collection for specialized hematology testing. Topics emphasized include the role of effective communication with a diverse patient population, special procedure considerations, pre-analytic variables, and the phlebotomist’s role in quality assurance and continuous quality improvement. This course is composed of 24 theory hours and 16 laboratory hours.

General Education – Not Applicable

**MLT.180 Phlebotomy Technician Practicum**

This course provides students with opportunities to observe, participate, and perform in the functional role of the Phlebotomist in a clinical setting and simulated lab setting. Students are supervised by course instructor or preceptors in a medical office, clinic, or hospital laboratory. The student will participate as a member of the healthcare team. The student will demonstrate safe and effective phlebotomy skills in a clinical setting by performing a minimum of 100 successful venipunctures including specimen collections. The student will demonstrate professionalism, communication techniques, patient teaching, documentation, confidentiality, infection control practices, and compassionate patient care. The student will complete weekly exam review modules to prepare for the certification examination. This course is composed of 16 exam review/theory hours and 80 lab/clinical practicum hours.

General Education – Not Applicable
MRI MAGNETIC RESONANCE IMAGING

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<td><strong>MRI.250 MRI Physics &amp; Instrumentation</strong></td>
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<td>This course introduces the student to the principles of nuclear magnetic resonance and the equipment used to produce the MR image. Emphasis is placed on understanding the relationships between the various imaging sequences/parameters and how their selection affects diagnostic quality. MR safety considerations and quality assurance techniques are also presented. Admission to the Magnetic Resonance Imaging program is required to enroll in this course. Offered: Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>MRI.252 MR Imaging Procedures</strong></td>
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<td>This course introduces the student to magnetic resonance imaging procedures. Patient screening and scanning protocols for examination of the head, neck, spine, thorax, abdomen, pelvis, musculoskeletal, and vascular systems will be addressed. The MRI technologist’s role in identifying disease processes and trauma conditions will also be emphasized as it relates to the selection of MR imaging planes, sequences, and parameters. Admission to the Magnetic Resonance Imaging program is required to enroll in this course. Offered: Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
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<td><strong>MRI.255 MRI Practicum</strong></td>
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<td>This practicum course involves three days per week of clinical experience in affiliate hospitals and/or imaging centers. Assignments are made to enable students to achieve competency in performing magnetic resonance imaging procedures and in evaluating equipment operation. Course includes clinical seminars. Admission to the Magnetic Resonance Imaging program is required to enroll in this course. Offered: Spring Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education – Not Applicable</td>
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MTL MACHINE TOOL

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**MTL.101 Machine Tool Fundamentals 1**

This course provides a basic introduction to machine tools with the primary emphasis on the engine lathe, drill press and hand tools common to the machinist trade.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**MTL.103 Manufacturing Processes**

This course is designed to familiarize the student with the basic processes that are common to industry and the techniques used in the manufacturing of a product.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**MTL.130 CNC Machining Technology**

This course provides an introduction to Computer Numerical Control (CNC) machining processes and the technology that supports them. Some of the processes covered are gauging, quality control, spot drilling, drilling, reaming, tapping, counter-boring, countersinking, defining and calculating speed and feed rates, screw thread identification, and drill sharpening. Students will perform these processes on manual equipment prior to observing them on CNC equipment. Occupational computer skills are also covered in this course.

Offered: Spring

Prerequisites: Take MFG.125

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education: Not Applicable

**MTL 135 Fund. of CNC Machine Applications**

This course is designed to give students a familiarization with the necessary practices and techniques used to operate Computer Numerical Controlled (CNC) machines. Some of the topics covered include CNC machine introduction, safe practices and techniques used to remove burrs, basic CNC machine operator maintenance, and production support equipment use and operation. Topics such as machine homing, tooling used, an understanding of offsets, setting offsets, and the application of offsets in the CNC machine will also be covered. Actual run time in the lab will be provided for hands-on machine operation. Students will work in groups and as individuals to gain experience in machine operation during a production run, applying theories learned to the production process.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTL.150 Fund. of CNC Turning Applications**

This course provides an introduction to Computer Numerical Control (CNC) turning processes and their proper application. Some of the topics covered include lathe set-up and operation, lathe safety, types of lathes, lathe work-holding devices, lathe cutting tools, grinding and sharpening of lathe cutters, and a review of lathe machining speeds and feeds. In this course, you will perform O.D. and I.D. turning operations on engine lathes as well as facing, drilling, reaming, tapping, grooving, chamfering, boring, knurling, tapering, and thread cutting operations.

Offered: Fall

Prerequisites: Take MTL.130 or Proficiency-based Exam

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**MTL.155 Fund. of CNC Milling Applications**

This course provides an introduction to Computer Numerical Control (CNC) milling processes and their proper application. Some of the topics covered include machine set-up and operation, machine safety, types of milling machines, use and care of various cutting tools, and a review of milling speeds and feeds. The student will perform face and end milling operations as well as drilling, reaming, tapping, and slotting operations on manual milling machines. The proper use and care of accessories, such as edge finders, digital readouts, dial indicators, and boring heads, and an introduction to a CNC milling machine are also covered.

Offered: Fall

Prerequisites: Take MTL.130 or Proficiency-based Exam

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable
**MTL.160 CNC Lathe Set-up**  
2 2 3

Students will produce and troubleshoot Computer Numerical Control (CNC) lathe set-ups from job packets and machine parts to blueprint specifications. Students will learn simple G and M codes, download programs to machines, graphically verify programs, and prove out parts on 2-axis turning center utilizing various CNC controllers. Set-ups will include faceting, turning, drilling, grooving, and thread operations. Students will also learn to produce some simple tooling necessary to complete various set-ups.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**MTL.165 CNC Mill Set-up**  
2 2 3

Students will produce and troubleshoot Computer Numerical Control (CNC) mill set-ups from job packets and machine parts to blueprint specifications. Students will learn simple G and M codes, download programs to machines, graphically verify programs, and prove out parts on 3-axis machining centers using various CNC controllers. Set-ups will include face, end, and profile milling and drilling, slotting, boring, and tapping operations. Students will also learn to produce some simple tooling necessary to complete various set-ups.

Offered: Fall
Prerequisites: Take MTL.155
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where Applicable.
General Education – Not Applicable

**MTL.200 Fundamentals of Live Tooling**  
2 2 3

The course provides the specific skills required to efficiently and effectively operate machines employing multi-axis part processing to maximize machine productivity. This course covers concepts of Computer Numerical Control (CNC) machining, setup and operations, tooling and work-holding systems, and basics of manual part programming for drilling, milling, and tapping, as well as boring operations by utilizing G codes. Hands-on practice is an integral part of the class.

Offered: Spring
Prerequisites: Take MTL.160 and MTL.165
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**MTL.205 Live Tooling & Set-Up & Orientation**  
2 2 3

The course provides the knowledge and skills required to translate the part drawing into a finished product. Part programs will be created with a consistent focus on identifying those specific part features that readily lend themselves to 4-axis structured programming, and simultaneous machining. The individual will be capable of defining the list of required processes and their optimum sequential order, create the complete CNC part program, install the appropriate tools correctly, establish the program zero point, and perform corresponding tool offsets and related machine safety procedures.

Offered: Spring
Prerequisites: Take MTL.160 and MTL.165
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where Applicable.
General Education – Not Applicable

**MTL.210 CNC Lathe Process**  
2 2 3

This course is designed to provide the knowledge and skills required to create a Computer Numerical Control (CNC) program that will convert stock material into a finished product. The student will be capable of defining the list of required processes, their optimum sequence, create the complete CNC part program, install the appropriate tools correctly, establish the program zero point, and perform corresponding tool offsets. This course is also an advanced, hands-on study of Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) theory and applications using CAD/CAM software. Emphasis is placed on generating programs using advanced modeling techniques for the CNC lathe at an intermediate level under moderate instructor supervision. The course is structured to include classroom instructional theory and hands-on operation of a CNC turning center.

Offered: Summer
Prerequisites: Take MTL.160 and MTL.165
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

**MTL.215 CNC Mill Process**  
2 2 3

This course is designed to provide the knowledge and skills required to create a Computer Numerical Control (CNC) program that will convert stock material into a finished product on a vertical machining center. The students will be capable of defining the list of required processes, their logical / optimum sequence, create the complete CNC part program, install the appropriate tools correctly, establish the program zero point, and perform corresponding tool offsets. This course is also an advanced hands-on study of Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) theory and applications using CAD/CAM software. Emphasis is placed on generating programs using advanced modeling techniques for the CNC mill at an intermediate level under moderate instructor supervision. The course is structured to include classroom instructional theory and hands-on operation of a CNC vertical machining center.

Offered: Summer
Prerequisites: Take MTL.160 and MTL.165
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
**MTL.295 Operator Internship I** 

10 2

The objective of this course is to integrate classroom theory with industry practice. All students will receive on-the-job training with selected area industry in the public and private sectors. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions. 160 hours required for course completion.

Offered: Fall or Spring or Summer

Prerequisites: Take MFG.125, MFG.130, MTL.103, MTL.130, and MTL.135.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTL.296 Operator Internship II**

10 2

Students who are currently employed in the industry will perform a special project on a topic of interest to the student and his/her firm. The project will be supervised by the supervising instructor and a job site supervisor.

General Education – Not Applicable

**MTL.297 Programmer Internship I**

10 2

The objective of this course is to integrate classroom theory with industry practice. All students will receive on-the-job training with selected area industry in the public and private sectors. All internship positions will be supervised by the supervising instructor and a job site supervisor. The positions associated with this internship will be non-paying positions.

Offered: Fall or Spring or Summer

Prerequisites: Take MAT.101, MTL.150, MTL.155, MTL.160, MAT.102, MTL.200, MTL.205, MTL.210, and MTL.215

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTL.298 Programmer Internship II**

10 2

Students who are currently employed will perform a research project on a topic of interest to the student and his/her firm. The project will be supervised by the supervising instructor and a job site supervisor.

Offered: Fall or Spring or Summer

Prerequisites: Take MAT.101, MTL.150, MTL.155, MTL.160, MTL.165, MAT.102, MTL.200, MTL.205, MTL.210, and MTL.215

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
MTS MORTUARY SCIENCE

Courses

MTS.110 History of Mortuary Science 3 3
Funeral practices and beliefs of all major Western cultures from pre-Egyptian times to the present are reviewed with special emphasis on Judeo Christian tradition as the primary basis of modern belief. The origin and development of present day practices including embalming and disposition are discussed. Special emphasis is placed on modern development in funeral service education and professional organizations. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.) Admission to the Mortuary Science program is required to enroll in this course.
Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MTS.120 Mortuary Law 3 3
Instructional material will include the study of the laws as they pertain to the everyday operation of a licensed funeral home within each of the various states. This information will include such issues as trust funds, pre arrangement laws, employment laws and rules, laws regarding cremation, and disinterment. Licensing rules will also be addressed in this course as well. This course must be completed with a grade of C or above to continue in the Mortuary Science Program. Admission to the Mortuary Science program is required to enroll in this course.
Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MTS.130 Introduction to Microbiology - Mort Sci 2 2
This eight-week course is designed to introduce the student to the principles of microbiology as they relate to the mortuary science profession. Areas of study will include the role of diseases and types of pathogens and microbes which will infect and attack the human body. Study will include issues pertaining to both the spread of infectious agents, as well as their control. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)
Offered: Spring
Prerequisites: BIO.111 and CHM.100 with grades of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MTS.131 Introduction to Pathology-Mortuary Sci 2 2
This eight-week course is designed to meet the needs of students in the Mortuary Science Program. It will include a general discussion of disease and a brief introduction to surgical, clinical, physiological, and forensic pathology. (This course must be completed with a grade of C or above to continue in the Mortuary Science program.
Offered: Spring
Prerequisites: BIO.111 and CHM.100 with grades of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MTS.140 Embalming 1 3.5 1 4
The student will be introduced to the techniques of embalming and preparation of the deceased for public viewing. Instruction covers knowledge of the skills necessary to embalm a normal case. Theory, practices and techniques of sanitation, restoration, and preservation of the deceased human remains are included. Laboratory experience will consist of a dissection laboratory and other related activities. Pre-embalming, embalming and post-embalming treatments will be covered in depth. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)
Offered: Fall
Prerequisites: BIO.111 and CHM.100 with grades of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable

MTS.150 Psychology of Grief & Death 3 3
This course has been designed to look at many perspectives of death, dying, grief, bereavement, and the human experiences and difficulties that each of us face. This course is a comprehensive study of the patterns of death and dying that the funeral profession will face. Some of the course will include past history of the mourning process, last rites, death in children's lives, and special cases. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)
Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
**MTS.160 Funeral Service Administration**  
5 5

This course is designed to teach effective funeral home management skills. Instruction includes recognizing, analyzing, and solving funeral service management problems and establishing and implementing policies regarding funeral home management. Funeral home operation and records, ethics, and professional regulations are examined. Laws that govern the practice of funeral services, the Illinois License Law, Vital Statistics Act, transportation rules and Social Security are studied. Responsibilities and relationships to local boards of health and the State Department of Public Health are emphasized. The student also develops product knowledge which includes caskets, vaults, monuments, and urns. This course must be completed with a grade of C or above to continue in the Mortuary Science Program.

Offered: Fall

Prerequisites: MTS.120 and BUS.201 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.170 Restorative Art**  
3 2 4

Instruction covers the restoration of the deceased for public viewing. Every aspect of performing a partial or total restoration is covered. Students will study the structure of the cranial and facial areas of the human skull and gain an appreciation of each facial feature's physiognomy, as well as its parts in the overall composite. Laboratory experience will consist of doing partial or total restorations for normal cases. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Offered: Fall

Prerequisites: BIO.111 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.210 Funeral Service Counseling**  
4 4

Current theories in personal counseling with an emphasis on bereavement are covered. The student is taught counseling skills and is introduced to disaster management and crisis intervention skills. Counseling in grief resolution is examined. Funeral service counseling needs are examined in relation to a variety of cultural, religious, and ethnic groups and their individual needs. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program).

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.215 Introduction-Mass Fatalities Incidents**  
2 2

This course is designed to introduce the student to the effective management of a mass fatalities incident. This course will include formal lecture and training involving all aspects of handling a mass fatality. This includes various types of incidents as well as information regarding the cooperative agencies that will be involved with the operation. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.) Must have second year student status in the Mortuary Science program to enroll in this course.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.220 Funeral Directing**  
4 4

This course is designed to introduce the student to the various types and styles of service that the funeral director must provide to the families that are served by the funeral home. These will include the various religions, as well as ethnic, social, and fraternal influences. The students will also have an opportunity to participate in making mock funeral arrangements, as well as directing those mock funerals. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Offered: Spring

Prerequisites: MTS.150 and MTS.160 with grades of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.225 Thanatochemistry**  
3 3

This course will offer an in-depth study of the basic principles of chemistry as they specifically relate to funeral service. Especially stressed are the chemical principles and precautions involved in sanitation, disinfection, public health, and embalming practice. Emphasis is placed on selected aspects of general chemistry, organic chemistry, and biochemistry as they relate to decomposition, disinfection, and the process of embalming. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Offered: Fall

Prerequisites: CHM.100 with a grade of C or better

Take MTS.140; Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**MTS.230 Embalming 2**  
3.5 1 4

This course offers an in-depth study of the various problems of embalming and proper chemicals used for each. Emphasis is placed on providing the student with the knowledge and skills necessary to care for any deviation from normal as it pertains to the preparation of the deceased for public viewing. Laboratory experience will consist of a dissection laboratory and other related activities.

Offered: Spring

Prerequisites: MTS.140 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
### MTS.240 Funeral Service Seminar

1 1

This course is designed to allow for extensive testing of the student’s knowledge, both theoretical and technical. Reviews of the material for the National Board Examination will take place at this time and examinations will be administered. These examination topics will be announced ahead of time and will be selected from the various subjects of study as listed within the curriculum outlines from the American Board of Funeral Service Education. This course will further prepare each student prior to graduation for the successful completion of the National Board Examination. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Offered: Spring

Prerequisites: MTS.160 with a grade of C or better

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

### MTS.250 Funeral Service Practicum

15 3

Students will be assigned by the program coordinator to an approved funeral home for an eight-week period learning from actual practice situations. Students will not be allowed to return to either a present or former employer for this eight week period. This practicum will serve as an actual practice situation involving organization and administration of procedures and policies of the establishment. Students will perform duties as assigned by the preceptor and coordinator to include the participation in the execution of not less than 10 total funeral services rendered to a family. Service reports and other assignments are also required to be completed by the student. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Student must have permission of program coordinator to enroll in this course.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

### MTS.260 Restorative Arts/Embalming Practicum

15 3

Students will be assigned by the program coordinator to an approved funeral home for an eight-week period learning from actual practice situations. Students will not be allowed to return to either a present or former employer for this eight week period. The students will learn embalming and restorative art techniques by active participation in these experiences under the supervision of an approved clinical instructor or preceptor. Service reports and other assignments are also required to be completed by the student. (This course must be completed with a grade of C or above to continue in the Mortuary Science Program.)

Requirement: The student must pass a practical examination on embalming techniques at the conclusion of their practicum in order to successfully pass this course. Student must have permission of program coordinator to enroll in this course.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

### MTS.270 Exam Review Seminar

1 1

This seminar course is designed to assist each student in identifying weak areas of study as well as allow for a comprehensive review of educational materials that will be contained within the National Board Examination that each student must take. This will aid each participant in the study of material as a review. Student must have permission of program coordinator to enroll in this course.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable
MUS MUSIC

Courses

MUS.100 Music in the Western World  3  3
Through understanding of the common elements of music, students trace the common ingredients of music from the Middle Ages to the present day. The study is undertaken in an historical and cultural perspective that highlights the great composers and compositions of the last 1000 years. The course is open to all students.
Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
IAI Course No. F1 900
General Education – Humanities Human Relations

MUS.101 Introduction to American Music  3  3
This course traces the origins and changes in our folk, religious, classical and popular music. It is open to all students.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
IAI Course No. F1 904
General Education – Fine Arts Human Relations

MUS.105 Non-Western Music  3  3
This course covers the basic elements of music (melody, rhythm, harmony, and form) and perceptive listening as they relate to non-Western music. Examines the music culture of several non-Western societies.
Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
IAI Course No. F1 903N
General Education – Fine Arts Human Relations

MUS.107 Music in the Theatre  3  3
This course is a survey of western traditions and elements of music in the theatre including opera, operetta, and Broadway musicals. Students will examine text, music, and performance media as methods for communicating the philosophic and aesthetic movements of composers, lyricists, performers, and their eras. No previous music experience is required.
Offered: As Needed
Applicable toward graduation at CSC where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable
General Education: Fine Arts IAI Course No.: F1 910.
General Education – Fine Arts

MUS.122 Jazz Combo  2  1
The Jazz Combo is composed of four to eight musicians who perform and study jazz in a small group setting. The literature for the ensemble ranges from Dixieland to be-bop and modern jazz. Students explore the language, skills, and materials of jazz music through performing a variety of jazz combo repertoire. Improvisation is required of all jazz combo performers. It may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.123 Sandburg Choir  2  1
The Sandburg Choir is a mixed-voice ensemble which performs a wide variety of music, including classical, jazz, folk, spiritual, and contemporary. The group performs frequently, both off and on campus, and tours annually. It may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.125 Small Vocal Ensemble  2  1
The Small Vocal Ensemble is a select group of singers whose members are chosen from the Sandburg Choir. This group specializes in performing music specifically appropriate for small vocal ensembles, from madrigals and motets to vocal jazz. There are frequent public performances, both on and off campus. The group tours each year with the Sandburg Choir. This course may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.150 Applied Music I  .5  1  1
This course provides a one half-hour private lesson each week and is open to all students. Students will learn the basics of the instrument and/or method. This course is intended for non-music majors and music majors studying an instrument other than their primary one. It may be repeated once for up to a maximum of two semester hours of credit.
General Education – Not Applicable

MUS.151 Applied Music I  1  2  2
This course provides a one-hour private lesson each week and is open to all students. Students will learn the basics of the instrument and/or method. This course is intended for music majors on their primary instrument and non-music majors desiring more in-depth musical study. It may be repeated once for up to a maximum of four semester hours of credit.
General Education – Not Applicable
MUS.205 Music and Society 3 3
An examination of societal issues as they are manifested, through time, in music. Topics include musical expression and connection in gender, ethnicity, spirituality, war, politics, performance, film, dance, and narrative expression.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable.
IAI Course No. HF 900
General Education – Humanities Human Relations

MUS.222 Jazz Combo 2 1
The Jazz Combo is composed of 4-8 musicians who perform and study jazz in a small group setting. The literature for the ensemble ranges from Dixieland to be-bop and modern jazz. Students explore the language, skills, and materials of jazz music through performing a variety of jazz combo repertoire. Improvisation is required of all jazz combo performers. It may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Prerequisites: Take 2 semester of MUS.122;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.223 Sandburg Choir 2 1
Sandburg Choir is a mixed-voice ensemble that performs a wide variety of music, including classical, jazz, folk, spiritual, and contemporary. The group performs frequently, both off and on campus, and tours annually. It may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Prerequisites: Take 2 semesters of MUS.123;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.225 Small Vocal Ensemble 2 1
The Sandburg Chamber Choir is a select group of singers whose members are chosen from the Sandburg Choir. This group specializes in performing music specifically appropriate for small vocal ensembles, from madrigals and motets to vocal jazz. There are frequent public performances, both on and off campus. The group tours each year with the Sandburg Choir. It may be taken twice for credit. An audition is required.
Offered: Fall or Spring
Prerequisites: Take 2 semesters of MUS.125 or instructor permission
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AFA, AS, AAS, AGS and Certificates where applicable.
General Education – Not Applicable Elective Only

MUS.250 Applied Music 2 .5 1 1
This course provides a one half-hour private lesson each week and is open to all students. Students will learn intermediate techniques of the instrument and/or method. This course is intended for non-music majors and music majors studying an instrument other than their primary one. It may be repeated once for up to a maximum of two semester hours of credit.
General Education – Not Applicable

MUS.251 Applied Music 2 1 2 2
This course provides a one-hour private lesson each week and is open to all students. Students will learn the intermediate techniques of the instrument and/or method. This course is intended for music majors on their primary instrument and non-music majors desiring more in-depth musical study. It may be repeated once for up to a maximum of four semester hours of credit.
General Education – Not Applicable
NAD NURSING ASSOCIATE DEGREE

Courses

NAD.105 Nursing 1

This course provides an introduction to nursing, roles of the nurse, and focuses on patient care concepts. Emphasis is placed on the knowledge and skills need to provide safe, quality care. The theoretical foundation for basic assessment and nursing skills is presented, and the student is given an opportunity to demonstrate these skills in a laboratory and clinical setting. An introduction to the nursing process provides a decision-making framework to assist students in developing effective clinical judgement skills. A unit entitled Nursing Care in a Diverse Society will focus on the issues and implications associated with caring for clients with diverse and complex cultural backgrounds. Learning experiences are provided in the classroom, audio-visual tutorials, skills lab, simulation and clinical settings. Students will provide care for individual adults with acute and/or chronic health care needs in the acute care, outpatient, community and/or long-term care and rehabilitation settings. Satisfactory (S) performance in clinical and skills lab and a minimum grade of C in theory are required in order to pass the course. Offered: Fall

Prerequisites: Admission to the Associate Degree Nursing Program. Corequisites: NAD.106, NAD.108, and BIO.211 with a grade of C or better. All corequisites must be completed with a grade of C or better to progress in the program.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education: Not Applicable

NAD.106 Medication Principles for Nurses

This course introduces general principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs for patients across the lifespan. This course also focuses on the knowledge needed for the development of basic dosage and calculation skills necessary for safe administration of medications. This course also includes terminology and abbreviations required to interpret physician’s orders and to read medication labels. Instruction includes various systems of measurement. The student will demonstrate accurate dosage calculation; discuss the principles of safe medication administration; and identify the elements of accurate documentation of medication administration. Math proficiency is determined by examination. Laboratory experiences include the application and skill of medication administration skills. Minimum grade of C is required in order to pass the course. Offered: Fall

Prerequisites: Prerequisite: Admission to the Associate Degree Nursing Program or Practical Nursing Program. Take NAD.105 or NUP.105, NAD.108, BIO.211 or BIO.111; Minimum grade C or better. All corequisites must be completed with a grade of C or better to progress in the program.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education: Not Applicable

NAD.108 Health Assessment & Clinical Reasoning

This course provides the framework for preparing students to perform comprehensive health assessments on patients across the lifespan utilizing the nursing process and focusing on the development of clinical reasoning. Emphasis is placed on taking a thorough nursing history, performing physiological, psychological, sociological, developmental, cultural, and spiritual assessments, as well as identification of patient safety, health risks, and stressors. Using the techniques of inspection, palpation, percussion, and auscultation, the student will be able to complete a systematic head to toe physical assessment of the adult patient. Emphasis is also placed on analyzing the data collected, including laboratory and diagnostic testing results and proper recording and documentation of assessed findings. Laboratory experiences provide an opportunity to practice assessment skills. Minimum grade of C is required in order to pass the course. Offered: Fall

Prerequisites: Prerequisite: Admission to the Associate Degree Nursing Program or Practical Nursing Program. Take NAD.105 or NUP.105, NAD.106; BIO.111 or BIO.211. All corequisites must be completed with a grade of C or better to progress in the program.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education: Not applicable

General Education – Not Applicable
This course builds on concepts, skills, and theories learned in NAD 105 and focuses on the care of individual adult patients and families with common and complex health problems that require medical and/or surgical intervention. Emphasis is placed on the care of patients with alterations in hemotologic, immunologic, endocrine, respiratory, gastrointestinal and genitourinary problems. Concepts of patient-centered care, quality improvement, informatics, evidence-based practice, safety, teamwork and collaboration, leadership and professionalism are integrated throughout the course. Learning experiences are provided in the classroom, audio-visual tutorials, skills lab, simulation and clinical settings. Students will provide care for individual adult patients and families with common and complex health problems that require medical and/or surgical health care needs in the acute care, outpatient, community and/or long term care and rehabilitation settings. Satisfactory (S) performance in clinical and skills lab and a minimum grade of C in theory are required in order to pass the course.

Offered: Spring
Prerequisites: Take NAD.105, NAD.106, NAD.108, and BIO 211 with a grade of C or better. All prerequisites must be passed with a C or better to progress in the program. Corequisite: NAD.130 and BIO 212. All corequisites must be passed with C or better to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not Applicable.
General Education – Not Applicable

This course is designed to establish a solid base of knowledge in nursing pharmacology. The nursing process will be utilized in discussing the basic pharmacological principles and drug classifications and their effects on the body. This course will explore pharmacokinetics, pharmacodynamics, contraindications and interactions of selected drugs, emphasizing nursing implications, roles and responsibilities in patient care and safe drug administration. The focus is to examine selected prototype drugs used in the treatment of illness and the promotion, maintenance and restoration of wellness in diverse individuals across the lifespan with special consideration given to the physiological, psychosocial, developmental, cultural, and spiritual needs of patients. Minimum grade of C is required in order to pass the course.

Offered: Spring
Prerequisites: NAD 105 or NUP 105 NAD 106 or NAD 108 BIO 211 or BIO 111. All prerequisites must be completed with a grade of C or better. Take NAD.125 or NUP125 and BIO.212. All corequisites must be completed with a grad of C or better to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education: Not applicable.
General Education – Not Applicable
NAD.190 Nursing Student Internship 1 12 4

This nursing student internship is a collaborative education experience that will enhance the development of their professional nursing role, critical thinking skills, and technical skills to help student nurses to begin to think like a nurse. Students have the opportunity to use previously learned nursing knowledge and skills in cooperating acute care facilities. The course will have a weekly online component that will discuss thinking in action topics related to safe patient care, patient outcomes, delivery of nursing care, assessment, documentation, inter-professional collaboration, communication, and evidenced based practice. The internship is designed to provide students with additional socialization into nursing opportunities and clinical practice in either medical-surgical nursing, psychiatric care, critical care, obstetrics, emergency care, perioperative care or pediatrics. The student will work along with a RN preceptor for approximately 24 hours a week for an eight-week commitment, during the summer between the first year and second year of the Associate Degree Nursing Program. The nursing student internship is an elective nursing course that will be either paid or unpaid based on the nurse intern program of cooperating acute care facilities. In addition to completion of the prerequisites, students must have a minimum 2.5 GPA, complete the nursing internship application, submit the application with two nursing faculty references, and complete selection interviews. The nursing internship has limited enrollment based on cooperating acute care facilities and how many nursing student interns they can accommodate. The selection process is 100% ownership of each facility. Those students selected will have additional requirements to complete, including facility orientations and preparation for the internship.

Offered: Summer
Prerequisites: Take NAD.105, NAD.106, NAD.108, NAD.125, NAD.130, BIO.211, and BIO.212.
Applicable toward graduation at Sandburg where program structure permits:
General Education – Not Applicable

NAD.200 Nursing 3 5 9 8

This course will focus on the care of individual adult patients and families with selected complex medical/surgical health alterations and childbearing women and newborns. Students will continue to expand their theoretical knowledge, use of the nursing process, and nursing skills as well as critical thinking and decision-making ability to delegate and prioritize nursing care. Emphasis is placed on reproduction and prenatal period, normal and high-risk pregnancies during the intra-partum and postpartum periods, high risk conditions of infant and newborn assessment, family dynamics and the promotion of healthy behaviors in patients. Emphasis will also be placed on the care of patients and families with health alterations in neurosensory and cardiac and vascular problems. Concepts of patient-centered care, quality improvement, informatics, evidence-based practice, safety, teamwork and collaboration, leadership and professionalism are integrated throughout the course. Learning experiences are provided in the classroom, audio-visual tutorials, skills lab, simulation and clinical settings. Students will provide care for individual adult patients and families with complex medical/surgical health alterations and childbearing families in acute care, outpatient, community and/or long term care and rehabilitation settings. Satisfactory (S) performance in clinical and skills lab and a minimum grade of C in theory are required in order to pass the course.

Offered: Fall
Prerequisites: NAD.125, NAD.130, BIO.212, BIO.200, and if applicable,NAD.180. All prerequisites must be passed with a C or better in order to progress in the program. Take NAD.205 with a minimum grade of C. All corequisites must be passed with a C or better in order to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not applicable.
General Education – Not Applicable
NAD.205 Community & Mental Health Nursing

The purpose of this course is to introduce students to community health nursing and mental health nursing. This course will focus on the promotion, maintenance, and restoration of mental health needs of the individual across the lifespan and the community health needs of the family and selected groups within communities. A major focus of this course is for students to critically think about and discuss the role of the community health nurse; understand basic epidemiological concepts; and perform a community health assessment exploring the impact of culture, socioeconomic status, lifestyle, environment, and violence on the health of the community. In addition, students will focus on the role of the mental health nurse; understand the etiology, pathophysiology and psychopathology, signs and symptoms, complications, medications, and treatment modalities; and perform mental health assessments on patients experiencing cognitive, mental and behavioral disorders. Emphasis is placed on management of patients facing emotional and psychological stressors as well as promoting and maintaining the mental health of individuals and families, health promotion and disease prevention of vulnerable groups within our communities, and health disparities that exist within a global environment. The community as a site for care and support services is addressed. Clinical experiences will be provided in selected mental health settings and students will plan and implement a service-learning project in the community setting. Satisfactory (S) performance in clinical and a minimum grade of C in theory are required in order to pass the course.

Offered: Fall
Prerequisites: Take NAD.125, NAD.130, BIO.212, and BIO.200 with a grade of C or better to progress in the program. Take NAD.200 with a grade of C or better to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not applicable.
General Education – Not Applicable

NAD.210 Nursing IV

This course will focus on the care of the individual adult patients and families with selected complex, multisystem alterations in health and childrearing family. Students will continue to expand their theoretical knowledge, use of the nursing process, and nursing skills as well as critical thinking and decision-making ability to delegate and prioritize nursing care while functioning in a leadership role. Emphasis placed on normal growth and development of children, family dynamics, common pediatric disorders and the promotion of healthy behaviors in patients. Emphasis will also be placed on the care of patients and families with multisystem alterations and complex health problems in respiratory, renal, and burns in the emergency care and intensive care settings, as well as, oncology, and musculoskeletal trauma. This course will also focus on disaster preparedness, triage, and interdisciplinary collaboration. Concepts of patient centered care, quality improvement, informatics, evidence-based practice, safety, teamwork and collaboration, leadership and professionalism are integrated throughout the course. Learning experiences are provided in the classroom, audio-visual tutorials, skills lab, simulation and clinical settings. Students will provide care for individual adult patients and families with complex, multisystem alterations in health and childrearing families in acute care, outpatient, community and/or long term care and rehabilitation settings. Satisfactory (S) performance in clinical assignments and a minimum grade of C in theory are required in order to pass the course.

Offered: Spring
Prerequisites: Take NAD.200 and NAD.205 with a grade of C or better. All prerequisites must be passed with a C or better in order to progress in the program. Take NAD.220 with a minimum grade of C. All corequisites must be passed with a C or better in order to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not applicable.
General Education – Not Applicable

NAD.220 Professional Issues

This course facilitates the transition of the student to the role of a professional nurse at the entry level and will prepare the students to take the NCLEX-RN licensing examination. Emphasis is placed on contemporary issues and management concepts, as well as developing the skills of delegation, conflict management, and leadership. Legal and ethical issues are discussed with a focus on personal accountability and responsibility. Standards of practice and the significance of functioning according to state regulations and statutes are analyzed. Strategies for planning a career and advancing the profession of nursing will be emphasized. Students will develop a professional portfolio demonstrating professional growth and assisting in their career development. Minimum grade of C is required in order to pass this course.

Offered: Spring
Prerequisites: Take NAD.200 and NAD.205 with a grade of C or better in order to progress in the program. Take NAD.210 with a minimum grade of C in order to progress in the program.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education: Not applicable.
General Education – Not Applicable
NUA NURSING ASSISTANT

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Courses

**NUA.105 Basic Nursing Assistant Training** 6.5 3 8

This course will provide the student with the cognitive (knowledge), psychomotor (skills), and affective (behaviors) necessary to perform basic patient care in a variety of healthcare settings. It prepares the student to function in the role of nursing assistant under the supervision of a Registered Nurse (RN) or Licensed Practical Nurse (LPN). This course meets the Illinois Department of Public Health (IDPH) guidelines for Basic Nursing Assistant Training Program (BNATP) curriculum. This course is highly recommended for students interested in a nursing career or wanting an entry-level position in the health care field. Coursework includes development of basic nursing skills through lecture, simulation skills laboratory, and supervised clinical experiences at a long-term health care facility. After students successfully complete the Basic Nursing Assistant Training Program (BNATP), they are eligible to take the State Nursing Aide Competency Exam. Upon passing the Nurse Aide Competency Examination, students are added to the Healthcare Worker Registry, and then can be employed as a Certified Nursing Assistant (CNA).

General Education – Not Applicable
NUP NURSING - PRACTICAL

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<th>Courses</th>
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<tr>
<td>NUP104 LPN IV Certification</td>
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This class prepares students for initiating and/or maintaining common intravenous therapies. LPN IV Certification is a way for licensed nurses to gain additional experience. Students will learn about the principles and practices, insertion techniques, equipment, infusion calculation rates, management guidelines, principles of antibiotic administration and preventative measures for IV therapy in stabilized clients under the supervision of a registered nurse, physician, or dentist, or as approved by the Illinois Nurse Practice Act guidelines. Licensed as an LPN in good standing with IDFPR (Illinois Department of Professional Regulation) is required to enroll in this course.

Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

NUP105 Practical Nursing I

This course is an introduction to nursing and the roles of the practical nurse. It focuses on patient care concepts. Emphasis is placed on the knowledge and skills needed to provide safe, quality care. The theoretical foundation for basic assessment and nursing skills is presented, and the student is given an opportunity to demonstrate these skills in a laboratory and clinical setting. The nursing process is introduced and serves as the foundation for the development of critical thinking skills. Other topics covered include professionalism, patient-centered care, legal and ethical responsibilities, and evidence-based practice. A unit entitled Nursing Care in a Diverse Society will focus on the issues and implications associated with caring for patients with diverse and complex cultural backgrounds. Students will provide care for individual adults with acute and/or chronic health care needs in the acute care, outpatient, community, and/or long-term care and rehabilitation settings. Satisfactory (S) performance in clinical and skills lab and a minimum grade of C in theory are required in order to pass the course. IAI Course No.: Not applicable Offered: Fall Prerequisites: Admission into the Practical Nursing program. Co-requisites: NAD 106, NAD 108, BIO 111 or BIO 211 (all prerequisites and co-requisites with a grade of C or better) in order to progress in the program
Offered: Fall

Prerequisites: Prerequisites: Admission into the Practical Nursing program; Corequisites: NAD.106, NAD.108, BIO.111 or BIO.211; Minimum grade C or better in order to progress in the program;
Applicable toward graduation at CSC where program structure permits:
Degree or Certificate: AAS, AGE, All Certificates General Education: Not applicable.
General Education – Not Applicable

NUP125 Practical Nursing II

This course builds on concepts, skills, and theories learned in NUP 105 and focuses on the care of the individual patient and families with common health care problems. Building on concepts from previous courses, this course focuses on patient-centered care; quality improvement, informatics, evidence-based practice, safety, teamwork and collaboration, and professionalism are integrated throughout the course. The administration of patient care includes using the nursing process, performing basic assessments, using critical thinking, and assisting with patient education. Emphasis is placed on the care of patients with alterations of the integumentary, musculoskeletal, respiratory, cardiac, vascular, endocrine, immunological, hematological, gastrointestinal, genitourinary and neurosensory systems and oncology content. The concepts of patient care, nursing management, pharmacology and nutrition are included within each system. Content is presented from a patient-centered approach based on Maslow’s Hierarchy of Needs. Patient care includes consideration of physiological, developmental, psychosocial and spiritual needs. Consideration is also given to the impact of health issues, including the potential physical and mental adjustments, as well as restorative care. Learning experiences are provided in the classroom, as well as through audio-visuals tutorials, skills lab, simulations and clinical settings. Students will provide care for individual adult patients and their families with common health care problems that require medical and/or surgical health care in the acute care, outpatient, community and/or long-term care and rehabilitation settings. Satisfactory (S) performance in clinical and skills lab and a minimum grade of C in theory are required in order to pass the course. IAI Course No.: Not applicable Offered: Spring Prerequisites: NUP 105, NAD 106, NAD 108, BIO 111 or BIO 211 Co-requisites: NAD 130 (all prerequisites and co-requisites with a grade of C or better) in order to progress in the program
Offered: Spring

Prerequisites: NUP.105, NAD.106, NAD.108, BIO.111 or BIO.211 with a grade of C or better, All prerequisites and corequisites must be passed with a C or better to progress in the program. Corequisite: NAD.130 with the minimum grade of C.
Applicable toward graduation at CSC where program structure permits:
Degree or Certificate: AAS, AGE, All Certificates General Education: Not applicable.
General Education – Not Applicable
Practical Nursing III is an intensive eight-week summer course designed to familiarize the student with the holistic approach to care for the Childbearing and Childrearing Families. The Childbearing section will cover the antepartum, intrapartum, and postpartum periods of the normal patient and the neonate as well as those with complications. The normal processes of conception, fetal development, labor and delivery, postpartum period, and family involvement will be included. The Childrearing section will cover the growth and development of the pediatric patient, as well as the physical, psychosocial, cultural, and spiritual needs of the pediatric patient and their families with common pediatric disorders. The final section of this course will address transitional issues to prepare the student to transition into the role of the Licensed Practical Nurse at the entry level and will prepare the student to take the NCLEX-PN licensing examination. Emphasis will be placed on time management, supervision, quality improvement in nursing practice, and NCLEX preparation. The clinical component of this course allows the student to practice clinical skills while caring for the Childbearing and Childrearing families in a variety of healthcare settings. Satisfactory (S) performance in clinical and a minimum grade of C in theory are required in order to pass the course. IAI Course No.: Not applicable Offered: Summer Prerequisites: NUP 125, NAD 130 Co-requisites: None (all prerequisites and co-requisites with a grade of C or better) in order to progress in the program Offered: Summer Prerequisites: NUP 125 and NAD 130 with a grade of C or better Applicable toward graduation at CSC where program structure permits: Degree or Certificate: AAS, AGE, All Certificates General Education: Not applicable. General Education – Not Applicable
## NUT NUTRITION

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### Courses

**NUT.100 Introduction to Nutrition**  
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This course is intended to introduce students to basic knowledge of nutritional information. Included are the basic principles of nutrients, human body requirements, healthy food sources, cultural and social effects of food choices, and the basics of metabolism.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable  

**NUT.110 Nutrition**  
3 3  
This course is designed to introduce the student to the concepts and principles of nutrition emphasizing the role of nutrition in health while being able to identify food nutrients and their functions. Cultural, religious and geographical influences are discussed. Emphasis on current dietary recommendations for maximizing well-being and minimizing risk of chronic disease, focus on use of tables, food guides, and guidelines for making healthy food choices is integrated. Discussion also includes nutrition needs for stages of the lifecycle, methods for evaluating creditability of nutrition claims, safe and economic use of supplements, principles of energy balance, basic elements of food safety, diet for exercise and sports. One year of high school chemistry or biology or equivalent is required.  
Offered: Fall or Spring or Summer  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only
OMS ORGANIZATIONAL MANAGEMENT

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**Courses**

**OMS.101 Labor-Management Relations**

This course provides a basic examination of the roles of labor and management in the United States and their relationship to each other. The objectives, issues and problems of labor and management are studied through an analysis of collective bargaining clauses and the bargaining processes. Union growth, structure, management organization, labor-management legislation, wage structure and wage incentives are considered. Also covered are aspects of contract administration, as well as labor-management relations in a non-union environment. Community resource speakers are utilized.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
OSP OCCUPATIONAL SPECIAL PROBLEMS

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Courses

OSP199 Occupational Special Prob

This course is intended for the student who has satisfactorily completed all, or most of, the specialized course work in a particular CSC occupational program and desires to investigate a special problem for further learning in that area of study. The identification of the problem, determination of nature of result(s) to be achieved, design of problem solving approach, nature of report or finished product and commitment for supervision must be worked out between the student and a particular faculty member. The project proposal is then subject to approval by the Dean of Occupational Programs and Vice President of Instructional Services. If the proposal is approved, the student then must register for the course in the Admissions and Records Office. The course description title entered on the registration and transcript will reflect the topic of that specific special problem. A student may earn a maximum of four semester hours of credit in OSP 199.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
PHL PHILOSOPHY

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<th>Course Title</th>
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**Courses**

**PHL.100 Logic**

This course provides an introduction to the techniques of analyzing and clarifying arguments, and distinguishing good reasoning from bad. The emphasis is on informal fallacy logic as applied to social issues. This course is recommended for anyone desiring a course in practical logic and critical thinking. It is particularly useful for the student of English, Speech or Pre-Law.

Offered: Fall or as Needed
Prerequisites: ENG.101
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable. 
IAI Course No. H4 906
General Education – Humanities

**PHL.101 Introduction to Philosophy**

This course is for the student who questions or has an interest in the assumptions on which many decisions, values and purposes of institutions and society rest. The course deals with major philosophical problems, such as reality, and does one's view of reality make any difference. Knowledge and various ways of knowing will be studied as well as the conflict between those who believe in free will and those who believe in determinism.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AGS and Certificates where applicable.
IAI Course No. H4 900
General Education – Humanities

**PHL.102 Ethics**

This course is for students who want to become more aware of the standards of principles which are appealed to when they judge themselves or others are judged. Different moral positions that have been adopted by serious philosophers are discussed and applied to such topics as repression control, art, religion, political obligations and the role of government. Morality and different views of the nature of man as well as other interests and problems of man are studied.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable. 
IAI Course No. H4 904
General Education – Humanities Human Relations

**PHL.103 Biomedical Ethics**

This course introduces the student to biomedical ethics. Students will gain a beginning foundation for analysis as related to biomedical ethical dilemmas. Apply classical ethical theories to related topics and issues, utilize basic principles of health care ethics to discuss bio-medical ethical topics and current issues and examination of bio-medical ethical issues using a problem-solving approach.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AAS, AGS and Certificates where applicable.
General Education – Not Applicable Elective Only

**PHL.104 Philosophy of Religion**

This course will explore the big philosophical ideas that undergird western religious traditions. We will use contemporary and historical texts to explore key religious thoughts and suppositions. These ideas will be explored by employing the best techniques of critical inquiry and logical argumentation. Religious concepts to be explored will include but not be limited to; Arguments for the existence of God, the connection between reason and faith, religion and science, religion and ethics, and the problem of evil.

Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable General Education: Not Applicable-elective only.
General Education – Not Applicable Elective Only

**PHL.105 Comparative Religions**

This course will compare and contrast both eastern and western religions. These religions will be explored in light of their history, key internal workings, sacred writings, as well as issues of doctrine and practice.

Offered: As Needed
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable General Education: Not applicable-elective only.
General Education – Not Applicable Elective Only

**PHL.110 Introduction Critical Thinking**

This course provides practice in critical thinking, including value assessment and moral reasoning. Passages used in the course include social issues drawn from multi-cultural backgrounds. Students learn to discern the structure of an argument, definitional and descriptive assumptions, value conflicts, and assumptions, and to question and discuss those intelligently. The course is useful for entry-level thinking skills and in performing well in courses in the social sciences, humanities, and other disciplines.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS and Certificates where applicable General Education: Not Applicable-elective only.
General Education – Not Applicable Elective Only
**PHY Physics**

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<tr>
<th>Courses</th>
<th>PHY.110 Applied Physics</th>
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<tr>
<td>This course surveys various ideas in physics with an emphasis on problem solving and applications from many technical areas. Concepts studied include measurement, laws of motion, the resolution of forces, work and energy, simple machines, and properties of matter. Students must provide a hand-held scientific calculator.</td>
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<td>Offered: Spring</td>
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<tr>
<td>Prerequisites: MAT.101</td>
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<td>Applicable toward graduation at Sandburg where program structure permits:</td>
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<tr>
<td>Degree or Certificate: AAS, AGS, and Certificates where applicable.</td>
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<td>General Education – AGS Only</td>
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| PHY.130 The Physical Universe | 3 | 3 |
| This course is a study of the universe and the attempts of persons to understand it. Topics covered include techniques of investigation; instrumentation; organization and history of the solar system; birth, life, and death of a star; origin, history, and future of the universe; prospects for extraterrestrial life forms. |
| Offered: Fall or Spring |
| Applicable toward graduation at Sandburg where program structure permits: |
| Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. |
| IAI Course No. P1.906 |
| General Education – Science |

| PHY.151 General Physics 1 | 4 | 2 | 5 |
| This course is the first semester of a two-semester sequence in pre-calculus based physics. It is appropriate for students in pre-dental, pre-medical, nursing, education, and other programs which require a beginning course in physics. The course includes the study of mechanics, vibratory motion and waves, fundamentals of heat and thermodynamics. |
| Offered: Fall |
| Prerequisites: MAT.140 or concurrent enrollment |
| Applicable toward graduation at Sandburg where program structure permits: |
| Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. |
| IAI Course No. P1.900L |
| General Education – Science Lab Science |

| PHY.152 General Physics 2 | 4 | 2 | 5 |
| This course is a continuation of PHY 151. Topics covered include electricity and magnetism, electromagnetic waves, optics, and an introduction to modern physics. |
| Offered: Spring |
| Prerequisites: PHY.151 |
| Applicable toward graduation at Sandburg where program structure permits: |
| Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. |
| IAI Course No. P1.900L |
| General Education – Not Applicable Elective Only |

| PHY.161 Engineering Physics 1 | 4 | 2 | 5 |
| This course is the first of a two-semester sequence in calculus-based physics. Topics covered include classic mechanics, vibratory motion and mechanical waves, and fundamentals of heat and thermodynamics. This course is appropriate for those students who want to transfer into engineering or other university programs that demand one year of calculus-based physics. |
| Offered: Fall |
| Prerequisites: MAT.240 or concurrent enrollment |
| Applicable toward graduation at Sandburg where program structure permits: |
| Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. |
| General Education – Not Applicable Elective Only |

| PHY.162 Engineering Physics 2 | 4 | 2 | 5 |
| This course is a continuation of PHY 161. Topics covered include electricity and magnetism, electromagnetic waves, optics, and an introduction to modern physics. Students will use calculus principles and techniques in developing concepts, analyzing situations, and in further development of problem-solving techniques. |
| Offered: Spring |
| Prerequisites: PHY.161, MAT.241 or the equivalent as evaluated by the physics department |
| Applicable toward graduation at Sandburg where program structure permits: |
| Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. |
| General Education – Not Applicable Elective Only |
## POR POTUGUESE

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<td><strong>POR.110 Portuguese I</strong></td>
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This is the first of a two-course sequence of elementary Portuguese. The emphasis of the course is on acquiring conversational skills through practical use of the language.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AGS, AAS and Certificates where applicable.

General Education – Not Applicable Elective Only

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<th>Courses</th>
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<td><strong>POR.111 Portuguese II</strong></td>
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This is the second of a two-course sequence of elementary Portuguese. The emphasis of the course is on acquiring conversational skills through practical use of the language.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AGS, AAS and Certificates where applicable.

General Education – Not Applicable Elective Only
Courses

**POS.122 American Government & Politics**

This course covers the origin, principles, organization and functions of the American political system. It examines the legislative, executive and judicial branches in the United States as well as the nature and purposes of the nation-state in a democratically oriented society. Topics covered include the Constitution, civil liberties and civil rights, the three branches of government, political parties, elections, and appropriate comparisons to Illinois Government. This course is of interest both to persons planning to pursue a baccalaureate degree and other persons interested in increasing their understanding of the American system of government.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S5 900

General Education – Social Science

**POS.223 State & Local Government**

This course presents a study of the institutions, functions, problems, and politics at the state and local levels of government in the United States. It meets the Illinois state law requirement concerning constitutional proficiency. The course is of interest to the student of political science and the social sciences. This course would also benefit those serving at various levels of state and local government.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S5 902

General Education – Social Science

**POS.228 International Relations**

This course surveys the factors determining the relations between nations including the history of international relations, the concepts of national power and national interests, and the processes of implementing foreign policy. This course is of relevance to the student of political science or the social sciences or anyone interested in the study of world politics.

Offered: Spring

Prerequisites: POS.122

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S5 904N

General Education – Social Science

**POS.267 Comparative Government**

This is a comparative study of the governmental organizations, political behavior and decision-making processes of Great Britain, France, Germany, Russia, China and Japan. Selected developing nations are surveyed less intensively for purposes of contrast. This course is appropriate for a student planning to pursue a bachelor’s degree with a major or minor in political science. Also, it is a course of interest to the individual who desires to develop a better understanding of various forms of government.

Offered: As Needed

Prerequisites: POS.122

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S5 905

General Education – Social Science
# PSY Psychology

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<td><strong>PSY.100 Freshman Orientation</strong></td>
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<td>This course is designed to aid the new student in adapting to the college environment by explaining policies and procedures regarding registration, dropping and adding of classes, and counseling services. Offered: As Needed Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only</td>
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<td><strong>PSY.101 Introduction to Psychology</strong></td>
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<td>This course is designed to provide an understanding of a variety of topics within the field of psychology. It is not only designed for students planning on majoring in psychology, but for those who have an interest in the scientific basis of behavior, thought, and the physiological processes that underlie each. Offered: Fall or Spring or Summer Prerequisites: ENG.097 with a grade of C or better or placement into ENG.101 or Consent of Instructor Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S6 900 General Education – Social Science</td>
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<td><strong>PSY.107 Positive Psychology</strong></td>
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<td>Positive Psychology will encourage students to develop their potentials through research-based applications found in the areas of resiliency, adjustment, and positive emotions. This course will provide insights into strength-based behaviors by examining biological, psychological and sociocultural origins. Offered: Fall or Spring Applicable toward graduation at Sandburg where program structure permits: AA, AS, AAS AGS and Certificates where applicable. General Education – Not Applicable Elective Only</td>
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<td><strong>PSY.152 Career and Life Planning</strong></td>
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<td>This course is designed to assist the undecided student with the process of making a well-informed and insightful career decision. Personality assessments, interest inventories and values assessments will be administered to generate insightful career options and to assist students as they clarify and coordinate their career and personal goals. Common decision making obstacles will also be explored. In addition, guided occupational research, individualized career counseling sessions and academic-planning activities will be utilized to enable students to produce tangible career and academic plans upon completion of the course. Offered: Fall or Spring or Summer Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS and AGS General Education: Not Applicable IAI Course No.: NA Offered: Fall or Summer or Summer Prerequisite: None. General Education – Not Applicable</td>
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<td><strong>PSY.202 Psychology of Personality</strong></td>
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<td>This course offers a study of the major problems, concepts and formulations of personality. It will include development and structure of personality, including such topics as adjustment, social adequacy, work environments, aggression, prejudice and other behaviors. Offered: As Needed Prerequisites: The appropriate placement exam score, or take ENG.097 with a grade of C or better or consent of instructor. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. IAI Course No. S8 900 General Education – Social Science Human Relations</td>
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<td><strong>PSY.204 Social Psychology</strong></td>
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<td>Social Psychology is the scientific study of the way in which people's thoughts, feelings, and behaviors are influenced by the real or imagined presence of other people. This course will be composed of four sections: (1) Introduction to Social Psychology and Social Psychological Methods, (2) Understanding Ourselves, (3) Social Influence, and (4) Social Interaction. This course is of value to students who have an interest in the mutual influence of groups on the individual and of the individual on groups. Offered: Fall or Spring Prerequisites: Must take PSY.101 Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S8 900 General Education – Social Science Human Relations</td>
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<td><strong>PSY.205 Human Sexuality</strong></td>
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<td>This course is designed to provide the student with knowledge about the psychological, sociological and biological aspects of human sexuality; understand varieties of sexual expression and provide a cognitive base on which to make sexual decisions. Offered: As Needed Prerequisites: The appropriate placement exam score, or ENG.097 with a grade of C or better, or an ACT Reading score of 20 or higher. Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only</td>
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This course provides an introduction to the field of social gerontology. The course deals with the adult life cycle from the sociological and psychological perspective with special emphasis on the later stages of adulthood. Special topics on aging include theoretical approaches to social aging, the biological and psychological aspects of aging, work, retirement and leisure, institutionalization, and death and dying. Offered: As Needed

Prerequisites: The appropriate placement exam score, or ENG.097 with a minimum grade of C, or an ACT Reading score of 20 or higher.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. 

General Education – Social Science

This course is a study of human development from conception through adolescence. It consists of research methods, data, and developmental theories in and between all major areas of development including biological, social, emotional, and cognitive. This course is useful to students who will interact with children and/or adolescents in professional and personal settings. It is appropriate for parents as well as persons in educational, behavioral, and social sciences. Offered: As Needed

Prerequisites: The appropriate placement exam score, or ENG.097 with a grade of C or better, or an ACT Reading score of 20 or higher.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Social Science

This course is a study of the development of human beings over the entire lifespan. It begins with an overview of developmental theories and then traces the individual from conception through infancy, childhood, adolescence, adulthood, aging, and death. Offered: As Needed

Prerequisites: The appropriate placement exam score, or ENG.097 with a grade of C or better, or an ACT Reading score of 20 or higher.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education – Social Science

Abnormal Psychology will introduce students to behavioral disorders and research methods used in the field. This course will provide insight into abnormal behavior by examining biological, psychosocial, and sociocultural origins. Students will also learn about assessment, categorization, and treatment options for disorders, in addition to preventative measures. Offered: Fall or Spring or Summer

Prerequisites: Take PSY.101

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable. General Education – Not Applicable Elective Only
RDG READING

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**RDG.120 Strategies for Success in College**  
3 3

This course will introduce students to strategies that promote success in college. Students will explore internal factors that influence success in college, including learning styles, educational objectives and personal expectations. External factors, including locus of control and generational influences will also be explored. Students will also be introduced to the specific skill sets necessary for success in college, including time-management skills, critical thinking and reading skills, test-taking skills, goal-setting skills and problem solving skills. Students will also be introduced to college resources when appropriate.

Offered: Fall or Spring

Prerequisites: The appropriate placement exam score, or ENG.097 with a grade of C or better, or an ACT Reading score of 20 or higher.

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.

General Education — Not Applicable Elective Only
RDT Radiologic Technology

Courses

RDT.100 Introduction to Radiologic Technology

This introductory course provides the student with general information about the profession of Radiologic Technology and introduces basic radiographic imaging principles and radiation protection. Special emphasis is also placed on medical ethics and professional conduct. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Spring

Prerequisites: Admission to Radiologic Technology program
Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO.212 Minimum, grade C;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

RDT.101 Radiologic Technology Procedures 1

This course is designed to provide a knowledge base necessary to perform standard radiographic procedures. Content includes basic anatomy and positioning for examinations of the chest and abdomen, safe and proper use of x-ray equipment, and correct methods of handling and processing radiographic images. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Summer

Prerequisites: Admission to the Radiologic Technology program Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO. Application toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

RDT.110 Rad Tech Physics & Instrumentation 1

This course gives the student an understanding of physics concepts which are fundamental to the profession. Subjects covered include: atomic structure; matter vs. energy; principles of electricity; x-ray production, control and management; and interactions of radiation with matter. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Fall

Prerequisites: Admission to Radiologic Technology program and, RDT.100, RDT.101 and ALH.105, Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO.212 Minimum, grade C;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

RDT.111 Radiologic Technology Procedures 2

Content is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes basic anatomy and positioning for examinations of the abdomen, shoulder girdle, upper and lower extremity, pelvic girdle and lumbar spine. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course.

Offered: Fall

Prerequisites: RDT.100, RDT.101 and ALH.105
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.115 Radiologic Technology Practicum 1

This first course in clinical practice involves an average of 17.5 hours/week in the Radiology department of one of the affiliate hospitals. Emphasis is placed on patient contact as students are instructed and supervised in the performance of actual x-ray examinations of the extremities, chest, and pelvis. Attention is also directed toward the organization of the radiology department-examination priorities, patient preparation, processing of x-ray orders, etc. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Fall

Prerequisites: Admission to Radiologic Technology program
Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO.212 Minimum, grade C;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

RDT.120 Rad Tech Physics and Instrumentation 2

This course presents a detailed study of the technology used in acquiring, displaying and managing diagnostic images. Content is designed to establish a knowledge base in digital and analog image processing. Also discussed are image-intensified fluoroscopic, automatic exposure control and tomographic equipment requirements and design, as well as quality control and quality assurance.

Offered: Spring

Prerequisites: Admission to the Radiologic Technology program and, ALH.105, RDT.100, RDT.101, RDT.110, RDT.111, and RDT.115
Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO.212 Minimum, grade C;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
RDT.121 Radiologic Technology Procedures 3  3  3  4.5

Content is designed to provide a knowledge base necessary to perform radiographic procedures. This course includes basic anatomy and positioning for examinations of the cervical and thoracic spine, bony thorax, the gastrointestinal tract, the biliary system and the genitourinary system with emphasis on related pharmacology, equipment, and image analysis. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course.

Offered: Spring
Prerequisites: Admission to the Radiologic Technology program and ALH.105, RDT.100, RDT.101, RDT.110, RDT.111, and RDT.115
Take 1 group; Take BIO.205 Minimum grade C or BIO.211, BIO.212 Minimum grade C;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.123 Principles of Radiologic Technology 3  3

This course is designed to provide a knowledge base in factors that govern the production and recording of radiographic images. The properties of density, contrast, detail and distortion are analyzed extensively with emphasis on the factors that control and influence them. Other topics include: collimation, filtration, grid usage, and exposure factor formulation.

Offered: Spring
Prerequisites: ALH.105, RDT.100, RDT.101, RDT.110, RDT.111, and RDT.115
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.125 Radiologic Technology Practicum 2  17.5  3.5

This second clinical practicum involves an average of 17.5 hours/week in the Radiology department of one of the affiliate hospitals. This course stresses the development of competency in performing general examinations and basic fluoroscopic procedures. Students will also begin to develop a better understanding of the factors that influence radiographic quality as they apply the exposure principles learned in their theory courses. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Spring
Prerequisites: ALH.105 RDT.100 RDT.101 RDT.110 RDT.111 and RDT.115
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.201 Radiologic Technology Procedures 4  1  2  2.5

This course is designed to provide a knowledge base necessary to perform standard radiographic procedures. Content includes basic anatomy and positioning for examinations of the skull and facial bones. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course. Radiation therapy will be explored with an emphasis on basic principles of operation and general procedural considerations.

Offered: Summer
Prerequisites: RDT.100 RDT.101 RDT.110 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 ALH.105
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.205 Radiologic Technology Practicum 3  20  4

This third course in clinical practice involves an average of 32 hour week in the Radiology department of one of the affiliate hospitals for 10 weeks. Students will rotate through all areas of the Radiology Department this semester. A brief affiliation with the InterCommunity Cancer Center is incorporated into this course to enable students to observe patients receiving radiation therapy.

Offered: Summer
Prerequisites: RDT.100, RDT.101, RDT.110, RDT.111, RDT.115, RDT.120, RDT.121, RDT.123, RDT.125, ALH.105
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.211 Advanced Radiologic Technology Procedure 3  3

This course presents basic concepts of pharmacology, venipuncture and administration of diagnostic contrast agents and intravenous medications with appropriate delivery of patient care. Content is also designed to provide an introduction to the basic principles and operation of computed tomography equipment. Cross-sectional anatomy will be introduced along with an exploration of other medical imaging modalities.

Offered: Fall
Prerequisites: ALH.105 RDT.100 RDT.101 RDT.110 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 RDT.201 RDT.205
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable
RDT.212 Radiologic Technology Image Critique 3 3

This course provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of problem-solving techniques for image evaluation, and the factors that can affect image quality. Concepts related to disease and etiological considerations with emphasis on radiographic appearance of disease and impact on exposure factor selection will also be introduced. Actual images will be included for analysis.

Offered: Fall
Prerequisites: ALH.105 RDT.100 RDT.101 RDT.110 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 RDT.201 RDT.205
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.215 Radiologic Technology Practicum 4 25 5

This fourth Practicum involves an average of 25 hours per week of clinical experience. Emphasis is placed on developing competency in the performance of both general and special radiographic procedures.

Offered: Fall
Prerequisites: ALH.105 RDT.100 RDT.101 RDT.110 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 RDT.201 RDT.205
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.220 Radiologic Technology Capstone 3 3

Course designed to re-examine knowledge, skills and attitudes required of the radiographer. Students will create learning portfolios and practice resume writing and interviewing skills. Students will also prepare for AART Registry Examination through use of review modules and practice examinations.

Offered: Spring
Prerequisites: ALH.105 RDT.100 RDT.101 RDT.110 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 RDT.201 RDT.205 RDT.211
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.222 Radiation Biology 2 2

This course focuses on the biological effects of radiation including radiosensitivity and the factors influencing it. Risks vs. benefits of the use of radiation will be analyzed from the patient and operator standpoint. Additional topics discussed will include the various methods employed to minimize exposure to both radiation quantities & units and computer & digital imaging considerations along with understanding regulatory standards and recommendations. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Spring
Prerequisites: RDT.210 & RDT.215 with a grade of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.225 Radiologic Technology Practicum 5 25 5

This final practicum course stresses the refinement of the students’ clinical skills. All competency requirements must be fulfilled by the end of the semester. The clinical instructor at each hospital will be working closely with students in order to correlate their assignments with their competency requirement needs. A weekly seminar is conducted in addition to the assigned clinical hours during the second eight weeks of the course. Admission to the Radiologic Technology program is required to enroll in this course.

Offered: Spring
Prerequisites: Take ALH.105 RDT.100 RDT.101 RDT.111 RDT.115 RDT.120 RDT.121 RDT.123 RDT.125 RDT.201 RDT.205 RDT.211
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.250 Principles & Instrumentation 3 3

This course presents the foundations of CT image formation including data acquisition and subsequent image processing, recording, and archiving methods. The diagnostic quality of images obtained using various types of CT equipment will be emphasized along with considerations related to patient exposure dose. Admission to the Computed Tomography program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.252 Computed Tomography Procedures 4 4

This course introduces the radiographer to computed tomography imaging procedures. Patient care and scanning protocols for examination of the abdomen and pelvis, chest, head, neck, spine, and musculoskeletal system will be covered. Common abnormalities demonstrated by CT will also be discussed. Admission to the Computed Tomography program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable

RDT.255 CT Practicum 1 25 6

This practicum course involves three days per week of clinical experience in affiliate hospitals and/or imaging centers. Assignments are made to enable students to achieve competency in performing computed tomography procedures and in evaluating equipment operation. Course includes clinical seminars. Admission to the Computed Tomography program is required to enroll in this course.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable
RDT.262 Sectional Anatomy for Diagnostic Imaging  
This course is a study of sectional anatomy as demonstrated in the transverse, sagittal, and coronal planes. The use of both abstract diagrams and actual photographs of cadaver sections provide students with an understanding of the spatial relationships within the human body. CT, MRI, and/or ultrasound images are also used to supplement instruction.
Offered: Fall or Spring or Summer
Prerequisites: BIO.205 or equivalent
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate - AAS, AGS and Certificates where applicable.
General Education – Not Applicable
RRT RAIL OPERATIONS

Courses

**RRT.101 History of Railroading**

This course covers the history and traditions of railroading and the industry's role in North American economic development. Upon successful completion of this course, students will be able to list and explain the significance of major events in North American railroading.

Offered: Fall

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.102 Railroad Tech Careers**

The course includes information about technical careers in railroading, enabling students to choose suitable career paths. This course includes field trips that will demonstrate the relationships among technical work groups in day-to-day railroad operations. Upon successful completion of this course students should be able to describe basic technical job functions, requirements, and characteristics.

Offered: Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.120 Introduction to Railroading**

This course introduces the learner to the different classes of railroad operations, the railroad environment to include terminology and railroad language, and the overall railroad workplace environment.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.135 Basic Electro Motive Diesel (EMD)**

This is one in a series of courses in the Locomotive Mechanical certificate and AAS programs. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for Electro Motive Diesel engines and support systems.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable

**RRT.136 Basic GE Mechanical**

This is one in a series of courses in the Locomotive Mechanical certificate and AAS programs. This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting for GE diesel engines and support systems.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.137 Locomotive Air Brakes**

This is one in a series of courses in the Locomotive Mechanical certificate and AAS programs. It is designed to provide the student an introduction to the operation, testing, maintenance, and troubleshooting for 26L and 30 ACDW locomotive air brake systems.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.138 Locomotive FRA**

This is one in a series of courses in the Locomotive Mechanical certificate and AAS programs. This course is designed to introduce the student to the Federal Railway Administration and Department of Transportation Code of Federal Regulations Title 49, Parts 209, 218, 229, 231, and 232.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.142 Locomotive Electricity**

This course is designed to introduce the student to the basic electrical theory and concepts related to locomotive electrical systems.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AAS, AGS and Certificates where applicable.

General Education – Not Applicable

**RRT.143 Low Horsepower Electrical**

This is one in a series of courses in the Locomotive Electrical certificate and AAS programs. This course is designed to introduce the student to the operation, maintenance, and troubleshooting of EMD Low Horsepower locomotive electrical systems.

Offered: Fall or Spring

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate - AAS, AGS, and Certificates where applicable.

General Education – Not Applicable
**RRT.144 EMD Basic Electrical**  
2 3 3  
This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of EMD diesel engines and support systems.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable  

**RRT.145 GE Dash 8/9 Electrical System**  
2 3 3  
This course is designed to introduce the student to the basic operation, maintenance, repair requirements and trouble shooting of GE Dash 8/9 locomotive systems.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable  

**RRT.165 Rail Safety Quality & Environment**  
3 3  
This course discusses safety, quality, personal health and environmental awareness as it relates to the railroad industry. Emphasis is placed on the basic tools and techniques for improving these conditions on the job. Discussion will include the management of a hazardous materials handling program.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable  

**RRT.201 Railroad Operations**  
3 3  
This course includes information about the industry, its major assets, structure, and typical operations. Upon successful completion of this course, students will be able to define the current North American railroading industry characteristics, basic operations components and processes, and industry structure and administrative processes.  
Offered: Fall  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable  

**RRT.202 Railroad Safe-Qlty-Envirn**  
3 3  
This course covers the importance of safety, quality, personal health, and environmental awareness to the railroad industry and emphasizes the basic tools and techniques for improving these conditions on the job. Upon successful completion of this course, students should be able to define and explain the needs for improved safety, quality, health, and environmental awareness; describe their basic principles; explain the elements of successful programs, and apply these elements to typical tasks on the job.  
Offered: Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AAS, AGS and Certificates where applicable.  
General Education – Not Applicable
SOC SOCIOLOGY

Courses

**SOC.101 Introduction to Sociology**

3 3

The purpose of this course is to acquaint the student with the discipline of sociology as it applies to contemporary American society. This course provides an orientation to the student interested in social science or the helping professions. Among specific topics to be studied are: how the sociologist gathers information, the importance of culture and symbols, personality development, the changing structure of the family, social class and inequality, race and ethnicity, and deviant behavior. Offered: Fall or Spring or Summer.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S7 900
General Education – Social Science Human Relations

**SOC.102 Contemporary Social Problems**

3 3

The goal of this course is to focus the student's attention on problems and to provide a basis for thinking sociologically about those problems. The course is designed for the social science major as well as the student who wants a greater understanding of our complex society. Among the topics to be covered are the concept of a social problem, poverty and inequality, the changing family, crime and delinquency, the abuse of alcohol and drugs, and social regulation of sexual behavior. Offered: Spring.

Prerequisites: SOC.101
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S7 901
General Education – Social Science Human Relations

**SOC.103 Marriage and the Family**

3 3

This course examines the family as a social institution in modern America. The course will enable the student to recognize and scrutinize his/her personal values toward marriage and family life. Topics to be considered include discussions of the concept of love, choosing a mate, marital communications, dealing with marital conflict, parenting, sexual behavior and responsibility, and divorce. Students planning to transfer this course toward a bachelor's degree can expect it to be accepted by most four-year colleges as an elective rather than as applicable toward a major in sociology. Offered: Fall or Spring.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S7 902
General Education – Social Science

**SOC.105 Intro to Cultural Anthropology**

3 3

This course will be an overview of the discipline of cultural anthropology, introducing the student to diverse cultural forms around the globe through a variety of media and ethnographic materials. The media and ethnographic materials used will demonstrate how and why humans in different cultures have developed different solutions to the same problems. The student will be exposed to a variety of techniques which will assist the student in learning the social organization, technology, economic structures, religious belief systems and language of both past and present diverse cultures. The students will explore major theories, and concepts used to understand why humans behave as they do and the relationships that may exist between diverse societies. Offered: As Needed.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S1 901N
General Education – Human Relations Social Science

**SOC.201 Introduction to Anthropology**

3 3

The goal of this course is to introduce the study of general anthropology to students who have little acquaintance with the subject. This course will provide the student with knowledge of anthropology and how anthropology contributes to the scientific understanding of people. This course is of interest to the social science major as well as those people who are looking for an elective course. Some of the topics to be covered include human and primate evolution, the emergence of human culture, and the rise of urban society, the evolution of language, kinship and descent, and cultural diversity within the modern world.

Offered: As Needed.

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S1 900N
General Education – Social Science Human Relations

**SOC.203 Introduction to Diversity**

3 3

This course helps students come to know people from various ethnic/ racial, religious, and cultural groups that make up the American population. Issues concerning racism, age, gender, and sexual orientation are examined.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. S7 903D
General Education – Social Science Human Relations
**SOC.205 Social Problems-Professional Ethics**  
3 3

This course will provide a values-based approach to ethical professionalism and present the student with the tools to think about and deal with ethical issues in the work place. The course will examine through discussion the concepts of what a professional is and what it means to act professionally. It will include knowledge-based discussions of the features of moral reasoning and review case studies and scenarios that will facilitate the student's ability to construct methods of resolution when dealing with ethical issues of the work place. The course will cover in depth moral reasoning and ethical theories central to the moral life of any professional.

Offered: Fall or as Needed  
Prerequisites: ENG.101 or concurrent enrollment  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
General Education – Not Applicable Elective Only

**SOC.260 Gender & Society**  
3 3

Students in the course will examine gender theory, the historical and societal changes regarding gender roles, the interaction of gender and social structures, and the relationship of gender and social institutions within the United States. Students will also be given the opportunity to consider the similarities and differences of gender from a global, multicultural perspective.

Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No. S7 904D  
General Education – Social Science Human Relations
SPE SPEECH

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<thead>
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<th>Hr/Wk</th>
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**SPE.110 Interpersonal Communication**

This course attempts to develop an awareness of, and an insight into, the choices that are made by participation in face-to-face, non-public, human communication. The text and lectures are designed to create an understanding of theories and principles. Experiential exercises encourage the student to apply this understanding, and to use it in interpreting his/her own and other people's attempts at communication. Among the topics covered are the communication process, the self as a communicator, verbal and nonverbal language, cooperation and conflict, etc. This course is intended for persons planning to pursue a baccalaureate degree and those who desire to improve their verbal communication.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**SPE.120 Introduction to Public Speaking**

This is a performance course in public speaking. The principles of oral public communication will be presented through readings and lecture. The student will apply these principles in the speeches presented to the class. Emphasis will be placed on outlining and the discovery and organization of important ideas and the communication of those ideas to a specific audience. Written evaluation of speeches will be required to enhance critical communication skills. This course is intended for individuals who desire to complete a bachelor's degree and those who desire to develop competence in public speaking.

Offered: Fall or Spring or Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. IAI Course No. C2 900

General Education – Communications

**SPE.200 Group Discussion**

This course is concerned with the processes and practices of decision-making in small groups (committees, boards, social groups, etc.). The course will consider such topics as group characteristics, role behaviors, problem-solving process, leadership, conflict and cooperation. It is intended for students who intend to transfer and those who desire to improve their group process skills.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**SPE.220 Advanced Public Speaking**

The introductory study of public speaking (SPE 120) will be continued in this course. Additional theory will be presented and students will apply theory through practice as speakers and critics.

Offered: As Needed

Prerequisites: SPE.120

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only

**SPE.230 Parliamentry Procedures**

This course will focus on the use of parliamentary procedures by members of decision-making groups. Robert's Rules of Order will be used as the authority. Students will be given the opportunity to understand the rationale of the procedures and to participate in practice sessions. This course is intended for individuals who desire this course as part of their baccalaureate studies and those who desire to develop group leadership skills for community group situations.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.

General Education – Not Applicable Elective Only
# SPN SPANISH

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<tr>
<td>SPN.101 Elementary Spanish 1</td>
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<tr>
<td>SPN.102 Elementary Spanish 2</td>
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<tr>
<td>SPN.120 Spanish for Professionals 1</td>
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<tr>
<td>SPN.121 Spanish for Professionals 2</td>
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This is the first sequence of a complete course at the college level of elementary Spanish. It will provide the fundamentals for transfer credit or a study of basic Spanish grammar and vocabulary. This course will also introduce students to the culture and customs of Spanish-speaking people.

Offered: Fall or Spring
Prerequisites: The appropriate placement exam score or ENG.097 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

This is the second sequence of a complete course at the college level of elementary Spanish. It will provide the fundamentals for transfer credit or a study of basic Spanish grammar and vocabulary. This course will also provide opportunities for students to continue their study of the culture and customs of Spanish-speaking people.

Offered: Fall or Spring
Prerequisites: SPN.101 with a grade of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

This is the first sequence of a complete course at the college level of Spanish for professionals. It will provide the fundamentals of basic Spanish grammar and vocabulary with particular emphasis on the vocabulary related to the students’ professions. This course will also introduce students to the culture and customs of Spanish-speaking people.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

This is the second sequence of a complete course at the college level of intermediate Spanish. It will provide the fundamentals for transfer credit or a continued study of Spanish grammar and vocabulary. This course will also include oral discussion, short writing exercises, selective readings and will further students’ knowledge of the culture and customs of Spanish-speaking people.

Offered: Fall or Spring
Prerequisites: SPN.120 with a grade of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

This is the first sequence of a complete course at the college level of intermediate Spanish. It will provide the fundamentals for transfer credit or a continued study of Spanish grammar and vocabulary. This course will also include oral discussion, short writing exercises, selective readings and will further students’ knowledge of the culture and customs of Spanish-speaking people.

Offered: Spring
Prerequisites: SPN.201 with a grade of C or better
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
SSC SOCIAL SCIENCE

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**SSC.110 Global Issues**

This course introduces students to contemporary global issues and international relations. These diverse, complex issues stem from the synergistic interaction of economic, socio-cultural, and political factors. This course examines various influences that impact global issues, such as nation-states and governmental and non-governmental organizations as well as issues relating to gender, ethnicity, and power. The course also explores causes of conflicts and reviews potential solutions to contemporary global crises. *IAI Course No. S8 900*

General Education – Social Science Human Relations

**SSC.120 Statistics for Social Science**

This course introduces statistical methods through real-life problems as applicable in the social sciences. Students will have the opportunity to gather and analyze data. Commonly used statistical methods will be examined with discussion of descriptive and inferential methods. Topics include, but are not limited to, probability distributions, standard deviation, statistical inference, correlation and regression. Social science research is studied to determine necessary precision, interpretation skills and statistical procedures found in publications of both academic and applied research to help students critically interpret data. Qualitative and quantitative research studies will be critically evaluated. Statistical software is used to analyze data. This course is not intended for a mathematics major or minor. Students can take either SSC 120 or MAT 110, not both.

Offered: Spring or as Needed

Prerequisites: An ACT Math score of 25, and two years of high school algebra and one year of high school geometry or Geometry and Intermediate Algebra. MAT.083 with a grade of C or better and MAT.099 with a grade of C or better or two years of high school algebra and one year of geometry with grades of C or better or MAT.086 with a grade of C or better or MAT.098 with a grade of C or better.

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable. *IAI Course No. M1 902*

General Education – Math

**SSC.201 Ethnic Studies**

This course is a study of the cultures of various ethnic groups. The intent is to develop an understanding of the multivalued nature of our society, with insight into the rewards and problems that cultural pluralism creates. The focus in the course may change from year to year, sometimes being on one or two ethnic groups, sometimes a more general survey. However, it is not to be taken more than once. The course is of interest to students preparing for vocations where such understandings may be of value, such as, teaching or social work, or anyone interested in understanding the variety of our society.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only

**SSC.202 Perspectives of Social Science**

This course is designed to introduce students to basic research methods and theory bases used in the Social Sciences. The instructional approach is that of a seminar. Students will be introduced to a variety of methods used to study social research. A brief introduction to methodology of any one or combination of the following will be covered: History, Political Science, Sociology, Psychology, Geography, and Economics. Although there may be different disciplines highlighted, students are only allowed to take this course once.

Offered: As Needed

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable. General Education – Not Applicable Elective Only
THE THEATRE

Courses

**THE.110 Theatre Arts Appreciation**  
3  3  
This course examines the arts of the theatre, particularly acting, directing and set design. Also treated are the related topics of film and the development of the theatre including an historical account of the play as an artistic and literary form. This course will appeal to those who wish to gain greater knowledge of the things which go into the making of a theatrical production.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No.: F1 907  
General Education – Fine Arts Human Relations

**THE.111 Theatre History**  
3  3  
Theatre History provides students an overview of theatre and its place in history from Ancient Greece to present. Students will examine majors texts and the social and cultural phenomena that influenced their writing. An analysis of theatre and performance practice will provide students an understanding of performance practice and its evolution.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No.: F1 908  
General Education – Fine Arts

**THE.120 Introduction to Acting**  
3  3  
This course is designed to supply the student with introductory experience in both the theory and practice of the art of acting. In addition to lectures and discussions, the individual student’s scene and monologue work will be appraised by both professor and peers. This course should appeal to both those seriously interested in acting and those who would like to gain a working knowledge of what an actor does.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AFA, AAS, AGS, and Certificates where applicable.  
IAI Course No.:  
General Education – Not Applicable Elective Only

**THE.121 Acting Workshop 1**  
3  1.5  
This course provides the student an opportunity for intensive work in the development of monologues for use in auditions. Special concern is given to character analysis and creation, vocal and physical development of characters, script choices, audition etiquette, preparation of contrasting monologues and musical score selections, and the development of an actor’s head shot and resume.  
Offered: As Needed  
Prerequisites: THE.120  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AFA, AGS and Certificates where applicable General Education: Humanities  
IAI Course No.: Offered: As Needed.  
General Education – Not Applicable Elective Only

**THE.130 Theatre Practice**  
3  1.5  
The primary activity of this course is the production of a play. Students will work on two aspects of the play including on and off stage roles per their interests and the needs of the production. Students are expected to participate in rehearsals and production-week activities which may include evenings, weekends, and travel. May be repeated a maximum of three times. A student may count 4.5 semester hours toward graduation for THE.130.  
Offered: Fall or Spring  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS and Certificates where applicable General Education: Humanities  
Prerequisite: Consent of Instructor!  
IAI Course No.: Offered: As Needed.  
General Education – Not Applicable Elective Only

**THE.140 Oral Interpretation**  
3  3  
This course is concerned with the interpretation and performance of literature. Special attention is given to the analysis and interpretation of the ideas, attitudes, and persona found in literary texts. Student work will culminate in a public performance.  
Offered: As Needed  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGS, and Certificates where applicable.  
Prerequisite: Consent of Instructor!  
IAI Course No.: Offered: As Needed.  
General Education – Not Applicable Elective Only

**THE.150 Play Directing**  
3  3  
This course is designed to teach the inexperienced director to make choices about script, script analysis, casting, focus of scenes, and the mood, rhythm, pace, and main idea of production. A practical course that includes attendance at plays, exercise work, and directing scenes for public performance.  
Offered: As Needed  
Prerequisites: THE.120 or acting experience  
Applicable toward graduation at Sandburg where program structure permits:  
Degree or Certificate: AA, AS, AAS, AGE and Certificates where applicable General Education: Not applicable, elective only IAI Course No.: Offered: As Needed.  
General Education – Not Applicable Elective Only
# TQM TOTAL QUALITY MANAGEMENT

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<td>TQM.101 Total Quality Management</td>
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This is an introductory course in Total Quality Management (TQM). An in-depth study of TQM principles and practices will be covered which include: leadership, customer satisfaction, employee involvement, continuous process improvement, supplier partnership and performance measures. TQM techniques, such as SPC and ISO 9000, will be briefly discussed.

Offered: Summer

Applicable toward graduation at Sandburg where program structure permits:

Degree or Certificate: AAS, AGS, and Certificates where applicable.

General Education – Not Applicable
## WEL WELDING

### Courses

#### WEL.101 Fundamentals of Welding Theory

This course provides a convenient source of know-how or information that is needed by all persons going into the field of welding. Much information provides aids in selecting the correct process since this is directly related to the metal being welded. The processes are explained in detail. In addition, the course provides quality control data and reference material that is of high interest to welding personnel. The information is purely technical in nature and there is nothing included on actual welding technique. Areas of concentration will include welding processes and definitions, the shielded metal-arc (stick) welding process, the gas metal-arc (MIG) welding process, the gas tungsten-arc (TIG) welding process, the oxyacetylene (gas) welding process, weld quality control and other related welding information.

Offered: Fall
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

#### WEL.103 Welding Survey

This course is designed to allow those who have an interest in the welding trade (but are not sure of the skills involved, the environment, or their abilities to meet the demands of this profession) an opportunity to sample a variety of the skills a student in welding would be exposed to. Areas of study would be determined in joint agreement with the student and the instructor. Areas of study could include a variety of arc skills, gas shielded skills and/or oxyacetylene skills.

Offered: Fall or Spring or Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

#### WEL.124 Auto Body Welding

This course is a continuation of WEL 118 with concentration on auto body applications. The types of joints and welds used on thin, high strength steel automobiles will be emphasized. An additional fee is required.

Offered: Fall
Prerequisites: WEL.118
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

#### WEL.125 Welding Blueprints

This course provides an introduction to blueprint reading and related math for those individuals with limited or no background. Emphasis will be on welding prints, symbols, and mathematics pertinent to the welding field. Current welding prints from local businesses will be utilized throughout the course. This course is intended for welding majors or current welding employees seeking to improve their skills in these areas.

Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

#### WEL.126 Weld Test Evaluation

This course is designed to prepare students for employment by allowing them to practice skills already learned in preparation for acceptable completion of entry level qualification tests given in various welding processes at local welding businesses. The final exam for this course is the level 1 - AWS certification examination.

Offered: Fall or Spring
Prerequisites: Take WEL.110
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable General Education: Not Applicable.
General Education – Not Applicable

#### WEL.127 Welding Theory/Welding Evaluation

This course provides a convenient source of know-how or information that is needed by all persons going into the field of welding. Much information provides aids in selecting the correct process since this is directly related to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: Review of the major processes associated with surrounding industries. Nomenclature and definitions specific to this process.

Offered: Fall or Spring
Prerequisites: Take wel.102 wel.109 wel.111 wel.112 wel.114 wel.115 wel.116 wel.117 wel.118 wel.119 wel.120 wel.121 wel.122 and wel.129
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
WEL.129 Flux Cored Arc Welding  
2 1
This course is designed to enable students to produce quality fillet and groove welds in all positions using the flux cored arc welding process. Students will learn proper electrode selection, equipment set-up, and proper techniques used in industrial applications.
Offered: Fall or Spring
Prerequisites: Take WEL.107 WEL.118 and WEL.119 grade of C or better or take WEL.108 WEL.120;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.130 Industrial Safety  
1.5 .5 2
This course provides the student with specific instruction to facilitate safe work practices in industrial environments. Students will be introduced to different safety philosophies and terminology. Students will also become acquainted with OSHA policy and with the Right to Know laws. Also covered are units specific to fire safety, pressurized gases and welding, electrical hazards, and safe machine usage. Students will have the opportunity to earn the OSHA ten hour safety certification.
Offered: Summer
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.131 Electrical Principles of Welding  
1.5 1 2
This course introduces the fundamentals of electricity used in welding. Basic theory including Ohm's law, circuit characteristics, and power calculations as applied to power source selection for welding is covered. Some lab work will include testing meters and procedures used in trouble shooting power sources.
Offered: Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.149 Automated Welding Applications  
1 2 2
This course is designed to help students develop basic knowledge and skills related to automated welding and cutting processes used in commercial applications. The topics of the course will include CNC plasma cutting and robotic welding, including basic programming, system operation and maintenance. Safety procedures in automated operations will be emphasized.
Offered: Summer
Prerequisites: WEL.102, WEL.118, WEL.119 and WEL.120
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.150 Robotic Applications in Welding  
1 1.5 2
This course is designed to introduce the welder to the components of the welding robot and the application of robotics in production welding. Emphasis will be directed at the topics of robotic safety, robotic programming and robotic system maintenance.
Offered: As Needed
Prerequisites: WEL.118, WEL.119 and WEL.120
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable Elective Only

WEL.151 Introduction to Pipe Welding 1G Rolled  
1 1 1.5
This is the first of a series of courses designed to prepare the student for entry-level employment as a pipe welder in the energy and infrastructure industries. The student will develop proficiency in the safe operation of the shielded metal arc welding processes on pipe to meet commercial quality standards. Emphasis will be on introductory skills, safety, and proper techniques used on welding pipe in the 1G (Flat rolled) position.
Offered: Fall or Spring or Summer
Prerequisites: WEL.101, WEL.102, WEL.111, WEL.112, WEL.114, WEL.115, WEL.116, and WEL.117 Take WEL.125;
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.152 Pipe Welding 2G Horizontal  
1 1 1.5
This is the second of a series of courses designed to prepare the student for entry-level employment as a pipe welder in the energy and infrastructure industries. The student will develop proficiency in the safe operation of the shielded metal arc and gas tungsten arc welding processes on pipe to meet commercial quality standards. Emphasis will be on welding pipe in the 2G position (Horizontal) using SMAW and GTAW with various electrodes.
Offered: Fall or Spring or Summer
Prerequisites: WEL.151
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.153 Pipe Welding 5G Vertical  
1 1 1.5
This is the third of a series of courses designed to prepare the student for entry-level employment as a pipe welder in the energy and infrastructure industries. The student will develop proficiency in the safe operation of the shielded metal arc and gas tungsten arc welding processes on pipe to meet commercial quality standards. Emphasis will be on welding pipe in the 5G (vertical up and down) position using SMAW and GTAW with various electrodes.
Offered: Fall or Spring or Summer
Prerequisites: WEL.152
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
WEL.154 Pipe Welding 6G Inclined

1 1 1.5

This is the final pipe welding course designed to prepare the student for entry-level employment as a pipe welder in the energy and infrastructure industries. The student will develop proficiency in the safe operation of the shielded metal arc and gas tungsten arc welding processes on pipe to meet commercial quality standards. Emphasis will be on welding pipe in the 6G (inclined 45 degrees) position using SMAW and GTAW with various electrodes.
Offered: Fall or Spring or Summer
Prerequisites: WEL.153
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.160 Oxyacetylene Welding & Metal Preparation

1 4 3

This course is designed to develop proficiency in metal preparation and cutting techniques, as well as develop basic welding skills. Information provides aid in selecting the correct process since this is directly related to the metal being cut and/or welded. Emphasis will be placed upon: Oxy-fuel cutting (OFC), plasma arc-cutting (PAC), carbon arc-cutting (CAC-A) and oxy-acetylene welding (OAW) processes, Nomenclature specific to these processes, and safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take MFG.100 with a grade of C or better or concurrent enrollment.
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.162 Arc Welding Basics

1 4 3

This course is designed to prepare the student for entry level employment as a production arc welding operator in the steel fabricating and machinery building industry. The student will develop proficiency in the safe operation of the manual metallic shielded arc welding processes to meet commercial quality standards and is devoted to welding mild steel in the down hand positions. Areas of concentration will include: SMAW process, Nomenclature and definitions specific to this process, and Safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.160 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.164 Arc Welding Advanced

1 4 3

This course is a continuation of WEL 162 and provides information that is needed by all persons advancing in the field of welding. The focus of this course is correctly matching the welding process to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: Shielded Metal Arc Welding (SMAW) process and advanced welding techniques, Nomenclature and definitions specific to this process, and safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.162 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.166 Gas Shielded Arc Tig

1 4 3

This course provides information that is needed by all persons going into the field of welding. Much information provides aids in selecting the correct process since this is directly related to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: GTAW process, Nomenclature and definitions specific to this process, and safety, weld quality control, and other related welding information. Areas of concentration will include: GTAW process, Nomenclature and definitions specific to this process, and safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.164 with a grade of C or better.
Applicable toward graduation at CSC where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable. General Education: Not Applicable.
General Education – Not Applicable

WEL.168 Gas Shielded Arc Mig

1 4 3

This course provides information that is needed by all persons going into the field of welding. Much information provides aids in selecting the correct process since this is directly related to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: GMAW process, nomenclature and definitions specific to this process, and Safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.166 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable
WEL.170 Applications of GMAW & FCAW

This course provides information that is needed by all persons going into the field of welding. The focus of this course is correctly matching the welding process to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: Advanced gas metal arc welding (GMAW) and flux cored arc welding (FCAW) processes, nomenclature and definitions specific to this process, and safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.168 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.172 Welding Applications

This course provides information that is needed by all persons going into the field of welding. The focus of this course is correctly matching the welding process to the metal being welded. The processes are explained in detail and the course provides quality control data and reference material that is of high interest to welding personnel. Areas of concentration will include: Fabrication and layout, nomenclature and definitions specific to this process, and safety, weld quality control, and other related welding information.
Offered: Fall or Spring
Prerequisites: Take WEL.170 with a grade of C or better.
Applicable toward graduation at Sandburg where program structure permits: Degree or Certificate: AAS, AGS, and Certificates where applicable.
General Education – Not Applicable

WEL.202 Production and Inventory Control

This course is designed for students in the welding program, and it will help them to effectively work in environments from small jobbing shops to major manufacturing plants. They will receive a broad overview of planning and control factors involved in controlling inventory as well as managing production. Students will learn the essentials of forecasting and the variety of ways forecasters attempt to minimize error, including the use of software programs. They will learn about Master Production Schedules (MPS) and Material Requirements Planning (MRP) as well as Capacity Management and required planning for input and output. Kanban, the Theory of Constraints, Lean Production, and Just-In-Time (JIT) will be introduced. Finally, they will consider the benefit of partnering functions in purchasing and distribution, as well as integrating various systems for efficiency and effectiveness.
Offered: Fall or Spring
Applicable toward graduation at Sandburg where program structure permits:
Degree or Certificate: AAS, AGS and Certificates where applicable.
General Education – Not Applicable
ARCHIVED CARL SANDBURG CATALOGS

2017-18 Archive (http://catalog.sandburg.edu/catalogarchive/2017-18)
2016-17 Archive (http://catalog.sandburg.edu/catalogarchive/2016-17)
2015-16 Archive (http://catalog.sandburg.edu/catalogarchive/2015-16)
2013-14 Archive (http://catalog.sandburg.edu/catalogarchive/2013-14)

Other Archived Catalogs (http://www.collegesource.org/displayinfo/catalink.asp?dig={4A9259B2-3A7C-4861-B3CC-D82CF477B966}&oig={463AA332-19AF-4202-BDCD-BD0A390EA20D}&vt=0)

If you need to access catalogs from before 1993, please contact Carl Sandburg College at (309) 344-2518 and ask to be directed to the Library.
## Reference Guide

Inquiries concerning specific aspects of the College should be addressed to the appropriate office listed below:

Carl Sandburg College’s Main Campus is located in Galesburg, Illinois, with a Branch Campus located in Carthage. The Main Campus phone number in Galesburg is (309) 344-2518. The Branch Campus phone number in Carthage is (217) 357-3129.

<table>
<thead>
<tr>
<th>Office/Department</th>
<th>Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Advising/Registration</td>
<td>E100</td>
<td>(309) 341-5237</td>
</tr>
<tr>
<td>Main Campus Offices &amp; Departments-Galesburg</td>
<td></td>
<td>(309) 344-2518</td>
</tr>
<tr>
<td>Admissions Office</td>
<td>E100</td>
<td>(309) 341-5233</td>
</tr>
<tr>
<td>Art Department</td>
<td>F101</td>
<td>(309) 341-5303</td>
</tr>
<tr>
<td>Academic Support Services/Tutoring</td>
<td>B068</td>
<td>(309) 341-5262</td>
</tr>
<tr>
<td>Auto Tech Shop</td>
<td>B127</td>
<td>(309) 341-5263</td>
</tr>
<tr>
<td>Automotive Tool Room</td>
<td>B111</td>
<td>(309) 341-5263</td>
</tr>
<tr>
<td>Bookstore</td>
<td>B057</td>
<td>(309) 341-5259</td>
</tr>
<tr>
<td>Business Office</td>
<td>E100</td>
<td>(309) 341-5210</td>
</tr>
<tr>
<td>Loft Cafe</td>
<td>E123</td>
<td>(309) 341-5284</td>
</tr>
<tr>
<td>Career, Technical &amp; Health Education</td>
<td>B011</td>
<td>(309) 341-5254</td>
</tr>
<tr>
<td>Counseling</td>
<td>E100</td>
<td>(309) 341-5237</td>
</tr>
<tr>
<td>Cyber Cafe</td>
<td>B067</td>
<td>(309) 341-5459</td>
</tr>
<tr>
<td>Dental Hygiene, The Annex</td>
<td>AN102</td>
<td>(309) 344-2595</td>
</tr>
<tr>
<td>Disability Support Services</td>
<td>B068</td>
<td>(309) 341-5262</td>
</tr>
<tr>
<td>Dispatch Phone</td>
<td>D201</td>
<td>(309) 341-5304</td>
</tr>
<tr>
<td>Career Development Office</td>
<td>D207</td>
<td>(309) 341-5246</td>
</tr>
<tr>
<td>Faculty Teaching &amp; Learning Center</td>
<td>E233A</td>
<td>(309) 341-5438</td>
</tr>
<tr>
<td>Financial Aid Office</td>
<td>E101</td>
<td>(309) 341-5283</td>
</tr>
<tr>
<td>Fitness Center</td>
<td>F142</td>
<td>(309) 341-5460</td>
</tr>
<tr>
<td>Foundation Office/Scholarships</td>
<td>E208</td>
<td>(309) 341-5327</td>
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<tr>
<td>Tech Help</td>
<td>E233</td>
<td>(309) 341-5446</td>
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<tr>
<td>Humanities &amp; Fine Arts</td>
<td>C109</td>
<td>(309) 341-5427</td>
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<tr>
<td>Human Resources</td>
<td>D202</td>
<td>(309) 341-5223</td>
</tr>
<tr>
<td>Information Booth/Student Center</td>
<td>B101</td>
<td>(309) 345-8513</td>
</tr>
<tr>
<td>Information Technology Services</td>
<td>E244</td>
<td>(309) 341-5294</td>
</tr>
<tr>
<td>Library</td>
<td>E240</td>
<td>(309) 341-5257</td>
</tr>
<tr>
<td>Mailroom/Copy Center</td>
<td>E121</td>
<td>(309) 341-5240/5482</td>
</tr>
<tr>
<td>Maintenance Building</td>
<td>MN001</td>
<td>(309) 341-5302</td>
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<tr>
<td>Marketing &amp; Public Relations</td>
<td>A009</td>
<td>(309) 341-5328</td>
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<tr>
<td>Math &amp; Natural Science Office</td>
<td>C214</td>
<td>(309) 341-5363</td>
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<tr>
<td>College of Nursing Office</td>
<td>A103</td>
<td>(309) 341-5299</td>
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<td>Records Office</td>
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<td>(309) 341-5260</td>
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<tr>
<td>Security/Public Safety</td>
<td>D201</td>
<td>(309) 341-5304</td>
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<td>Security Emergencies</td>
<td>D201</td>
<td>(309) 341-5499</td>
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<tr>
<td>Shipping &amp; Receiving</td>
<td>E140</td>
<td>(309) 341-5293</td>
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<td>Social &amp; Business Sciences</td>
<td>C109</td>
<td>(309) 341-5427</td>
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<td>Student Government Office</td>
<td>B060</td>
<td>(309) 341-5295</td>
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<td>Student Life</td>
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<td>(309) 341-5332</td>
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<td>Student Services</td>
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<td>(309) 341-5237</td>
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<td>Student Services Computer Center</td>
<td>D100</td>
<td>(309) 345-8512</td>
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<td>Testing Center</td>
<td>B006</td>
<td>(309) 341-5323</td>
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<td>Transcripts</td>
<td>E100</td>
<td>(309) 341-5260</td>
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<tr>
<td>TRIO Student Support Services</td>
<td>E136</td>
<td>(309) 341-5362</td>
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<tr>
<td>TRIO Upward Bound Math-Science</td>
<td>E136</td>
<td>(309) 341-5362</td>
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<tr>
<td>TRIO Upward Bound</td>
<td>E136</td>
<td>(309) 341-5268</td>
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<tr>
<td>Veterans</td>
<td>E101</td>
<td>(309) 341-5321</td>
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<tr>
<td>Other Offices:</td>
<td></td>
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<tr>
<td>Annex, 209 E Main, Galesburg</td>
<td></td>
<td>(309) 344-2595</td>
</tr>
<tr>
<td>Branch Campus, 305 Sandburg Drive, Carthage</td>
<td></td>
<td>(217) 357-3129</td>
</tr>
<tr>
<td>Admissions/Advising, Business Office, Financial Aid, Registration, Records, &amp; Testing</td>
<td></td>
<td>ext. 7237</td>
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<tr>
<td>Bookstore</td>
<td></td>
<td>ext. 7243</td>
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<tr>
<td>Director of Branch Campus</td>
<td></td>
<td>ext. 7247</td>
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<tr>
<td>Library</td>
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<td>ext. 7244</td>
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<tr>
<td>Student Services Generalist</td>
<td></td>
<td>ext. 7247</td>
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<tr>
<td>Corporate &amp; Leisure College, CME Building, 2051 Tom L. Wilson Blvd.</td>
<td></td>
<td>(309) 345-3501</td>
</tr>
<tr>
<td>Welcome Center</td>
<td>B09</td>
<td>(309) 345-3500</td>
</tr>
</tbody>
</table>
ADMINISTRATORS

Bailey, Michael
Athletic Director
B.A., University of Northern Iowa

Banker, Christopher
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B.B.A University of Iowa
M.E., National University

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M.S., Saint Mary of the Woods College

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B.A., Judson University
M.A., National Louis University

Gall, Cory
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M.A., Western Illinois University

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M.S.N. St. Francis Medical Center/College of Nursing

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B.A.(HONS) University College Dublin, Dublin, Ireland

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B.A., Knox College

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D.B.A., St. Ambrose University

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M.S.N. McKendree University

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B.A. Knox College
M.S.N. University of Illinois

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M.A. Sangamon State University

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M.S., Ph.D., University of Wisconsin-Madison

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Paris, Michael A (Tony)
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B.A., M.A., Western Illinois University

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Associate Dean of Social and Business Sciences
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Advisor, Phi Theta Kappa
Double B.A. Southern Illinois University
M.A. University of Illinois - Springfield

Sanders, James D
Professor, Psychology
Social and Business Sciences
B.A., M.A., University of Colorado
Ph.D. University of Texas

Sharp, Susan D
Assistant Professor, Theatre
Humanities and Fine Arts
Fine Arts
B.A. St. Ambrose University
M.A. University of Northern Iowa

Slye, Bart
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Career and Corporate Development

Smolensky, Marjorie M
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Math and Natural Sciences
B.A. Kean College
M.S. Rutgers University

Stone, Christina S (Chrissy)
Instructor, Nursing
College of Nursing and Health Professions
A.A.S. Carl Sandburg College
B.S., M.S., University of Phoenix

Storey, Ian C
Instructor, English
Humanities and Fine Arts
B.S. Central Michigan University
M.A. Central Michigan University
Ph.D. Colorado State University

Walker, Lisa D
Assistant Professor, Art
Art Program Coordinator and Gallery Director
Humanities and Fine Arts
A.A. Elgin Community College
B.F.A. Rockford College
M.F.A. Bradley University

Whipple, Jackie D
Assistant Professor, Radiologic Technology
College of Nursing and Health Professions
A.A.S. Carl Sandburg College
B.A. Western Illinois University

Williams, Keith W
Instructor, Economics/Business Administration
Coordinator, Business Programs
Social and Business Sciences
B.S. Rochester Institute of Technology
M.B.A. Rockford College
A.B.D. St. Ambrose University

Wright, Larry E
Associate Professor, Automotive Technology
Career, Technical and Health Education
A.A.S. Carl Sandburg College
B.S. Bradley University

Wright, Jennifer
Instructor, English
Humanities and Fine Arts
B.A. Northern Illinois University
M.A. Northern Illinois University
S.P.A.R.K. Certificate, Roosevelt University

Yasenko, Daniel E
Counselor
A.A. John Wood Community College
B.S. Quincy College
M.S. Eastern Illinois University
NON-ACADEMIC STAFF

Allen, Amanda
Extension Instructional & Technology Services Specialist, Branch Campus

Arthur, Cindy
Instructional Design Assistant

Austin, Nora
Financial Reporting Specialist

Bailey, Patty Jo
Financial Aid Assistant

Blue, Rodney
Men's CC coach, Fitness Skills Coach

Blust, E. Dean
Coordinator of Public Safety

Bowen, Tamara (Tami)
Accounts Receivable Technician

Brackett, Michael
Administrative Computing Programmer/Analyst

Brooks, Amy
Enrollment Services Specialist

Burford, Amy
TRIO/SSS Academic Advisor/Retention Coordinator

Burkhardt, Stephanie
Annex Office Manager

Carder, Erin
Upward Bound Project Advisor

Caves, Alan
Grounds Assistant

Chansler, Troy
Grounds Assistant

Christensen, Michael
Public Safety Assistant

Clay, Margie
Office Assistant, Humanities & Social Science Depts.

Coleman, Barbara
Staff Services Technician

Colwell, Carl
Maintenance/Delivery

Cree, Sara
Coordinator of Institutional Research

Crump, Gaila
Grant/Accounting Technician

Damitz, Donna
Public Safety Officer

Day, Tony
Coordinator of Construction Projects and Facilities

Dennison, Todd
Public Safety Officer, 2nd Shift

Derry, Kathy
Custodian, 1st Shift

Diaz, Christina
Graphic Design Specialist

Durdle, Nancy
Office Assistant, Math/Natural Sciences & Career, Technical Heath

Eaton, Rebecca
Coordinator of Library Services

Engstrom, Tracy
Coordinator of Career Development

Erickson, Michelle
Coordinator, Veterans & Military Services/Financial Aid Specialist

Ferguson, Douglas
Computing Infrastructure Specialist

Fields, Lynette
Business Office

Fones, Candace
Administrative Computing Information Specialist

Fox, Brandon (B.J.)
Coordinator of Health and Fitness

Frey, Aaron
Public Relations Specialist

Frye, Abby
Library Information Assistant

Gaither, Bill
Coordinator of Multimedia

Gengenbach, Nicole
Administrative Assistant; Upward Bound Math & Science

Gilmour, Timothy
Institutional Effectiveness/Human Resources Information Specialist

Gray, Sara
Administrative Assistant TRIO Upward Bound/Testing Center

Green, LaDonna
Administrative Assistant to the Associate Dean of Nursing

Hannam, Gail
Instructional Design Team

Holmes, Jennifer
Academic Advisor/Retention Specialist

Huber, Lindsey
Senior Executive Assistant to the President/Secretary to the Board of Trustees

Inman, Diane
Data Assurance Specialist

**Jackson, Thad**  
AV Production Specialist

**Johnson, Lindell M. (Mark)**  
Building Maintenance

**Jones, Denzel**  
Public Safety Officer-Weekend

**Jones, Greg**  
Infrastructure Services Specialist

**Jones, Megan**  
Coordinator of Recruitment & Dual Credit

**Kidd, Margaret**  
Admissions and Records Specialist

**Kratz, Michael**  
Coordinator of Technology Support Services

**Krieg, Kaitlyn (Katy)**  
Administrative Assistant to the Dean of Extension Services

**Kunkle, Beth**  
Coordinator of Accounting Services

**Lambert, John**  
Public Safety Officer-Weekend

**Law III, Anthony**  
Coordinator, of Diversity and Recruitment

**Lewis, Tammi**  
Coordinator of Clinical & Laboratory Services

**Lundeen, Jeffrey**  
Building Maintenance

**McCants, Craig**  
Assistant Coordinator, Maintenance Services

**McCoy, Donald**  
Grounds Assistant

**McDowell, Ellen**  
Office Assistant, Physical Plant

**McGee, Katie**  
Admissions Recruiter

**McIntire, Kimberlee**  
Alumni Relations Specialist

**McKillop, Francis**  
2nd Shift Custodian

**McLaren, Seth**  
Public Safety Officer-Weekend

**Mills, Steven**  
Building Maintenance

**Morgan, Susan**  
Program/Data Assistant TRIO SSS

**Morris, Sherry**  
Student Information Specialist

**Neville, John**  
Public Safety Officer, Weekends

**Patterson, Megan**  
Academic Adviser

**Pendleton, Terrance**  
Public Safety Officer/Weekends

**Perkins, Christy**  
Coordinator of Administrative Computing

**Perryman, Makenzie**  
Administrative Assistant to the Director of Marketing and Public Relations

**Pickrel, David**  
Lead Custodian - 2nd Shift

**Poulson, Jeanette**  
Custodian/Maintenance, Carthage

**Ray, Mitch**  
Testing Center Coordinator

**Reed, Sara**  
Institutional Data Manager

**Cynthia Rescinito**  
Benefits Manager

**Rice, Susan**  
Risk Management/Accounting Technician

**Rose, Amanda**  
Custodian, 2nd Shift

**Runge, Jake**  
Coordinator of Academic Support Services

**Schwab, Lynn**  
Executive Assistant to the Vice President of Student Services

**Shannon, Dyson**  
Public Safety Officer, 3rd Shift

**Sharer, Sherri**  
Custodian, 1st Shift

**Smith, Darlene**  
Administrative Assistant to CFO & Dean of Career and Corporate Development

**Snow, Angela**  
Coordinator of Admissions and Records

**Spence, Kalene**  
Human Resource Generalist

**Staley, William Jr.**  
Custodian, 2nd Shift

**Stevens, Genevieve**  
Coordinator of Student Life
Thatcher, Eric
Web Programmer

Thomas, Linda
Coordinator of the Branch Campus

Torrance, Randi
Upward Bound Math-Science Advisor

Trulson, Emily
Upward Bound Project Advisor

Turner, Panda
Evening Office Assistant/Library, Branch Campus

Twaddle, Ryan
Fitness Supervisor/Athletic Coach

Van Fleet, Julie L.
Administrative Assistant to the Dean of Student Success

Wagner, Caitlin
Office Assistant, Career, Technical Health Education

Wells, Eric
Custodian, 2nd Shift

Williams, Allen
Custodian, 2nd Shift

Williams, Danielle
Coordinator of Alumni/Scholarships

Wilson, April
Payroll Specialist

Wilson, Debra
Administrative Assistant, Branch Campus

Winkler, Todd
Head Softball & Volleyball Coach
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