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Parents/guardians who have specific questions about the program of studies and enrollment procedures are invited to e-mail or call 563-927-3515 and ask for one of the following people:

**Principal's Office**

Tim Felderman, Principal  
timfelderman@w-delaware.k12.ia.us

Matt Weis, Assistant Principal/Activities Director  
mattweis@w-delaware.k12.ia.us

**Counselor's Office**

Shari Soppe  
sharisoppe@w-delaware.k12.ia.us

Shelby Piersch  
shelbypiersch@w-delaware.k12.ia.us

WEST DELAWARE COUNTY COMMUNITY SCHOOL DISTRICT

Annual Notice of Nondiscrimination

The West Delaware County Community School District offers career and technical programs in the following areas of study:

- Agriculture, Food and Natural Resources
- Business, Finance, Marketing and Management
- Human Services
- Applied Sciences, Technology, Engineering and Manufacturing

It is the policy of the West Delaware County Community School District not to discriminate on the basis of race, color, national origin, gender, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact Tim Felderman, West Delaware High School, 605 New Street, Manchester, Iowa 52057, 563-927-3515, extension 301, timfelderman@w-delaware.k12.ia.us.
EDUCATIONAL PLANNING

Of the required 56 credits needed for graduation, students must earn a total of 34 credits in six prescribed areas of study: English Language Arts, Math, Physical Education, Science, Social Studies and Financial Literacy. This requirement provides every student with a basic core of general education and meets all criteria established by the State Code of Iowa, the Department of Public Instruction, and the North Central Association.

Students are encouraged to plan carefully so as to enroll in those courses which best meet their individual needs and interests. Tests may be required for college admission, scholarships, placement, or admission to vocational or technical schools. It is the responsibility of the student to be aware of the information necessary to carry out their future plans. Students are encouraged to discuss individual situations with their counselor and to participate in vocational, career, and post-secondary planning activities.

Freshmen, Sophomores, and Juniors must carry a minimum of 4 credits each term. Seniors who qualify for open campus must carry a minimum of 3 credits per term. Those seniors who do not qualify for open campus must carry a minimum of 4 credits each term.

REQUIREMENTS FOR GRADUATION
West Delaware High School

I. Credit Requirements

West Delaware High School students must complete the following for a minimum of 56 credits to be eligible to graduate.

All graduation requirements must be met by all students, and the prerequisites must be completed by all students. At times, extenuating circumstances arise which necessitate an alternative graduation plan. The graduation plan will be developed and approved by school district administration.

Anyone applying for early graduation must fulfill the credits needed, and formally apply for early graduation through the high school principal.

Iowa Assessment/ISASP scores can affect which classes a student may take and in what order the student may take the courses.

1 term=1 credit with the exception of skinny classes
1 skinny class=0.5 credit per term

Recommended sequence of courses:

A. English Language Arts
   8 terms required (8 credits)
   Grade 9   English I or Advanced English I (2 terms)
   Grade 10  English II or Advanced English II (2 terms)
   Grade 11  English III or Advanced English III (2 terms)
              Two English elective credits (2 terms)

B. Math
   8 terms required (8 credits)
   Algebra I or Concepts of Algebra I (2 terms)
   Geometry or Concepts of Geometry (2 terms)
   Algebra II or Concepts of Algebra II (2 terms)
   Statistics or Statistical Analysis (2 terms)

C. Science
   6 terms required (6 credits)
   Grade 9   Science Interactions (2 terms)
              Biology or Concepts of Biology (2 terms)
              Chemistry I or Concepts of Chemistry (2 terms)

D. Social Studies
   7 terms required (7 credits)
   Grade 9   Global Studies, World Cultures or World Studies (2 terms)
   Grade 10  U.S. History (2 terms)
   Grade 11  Intro to Sociology or Intro to Psychology (1 term)
   Grade 12  American Government (2 terms)
E. Physical Education 4 terms required (4 credits)
   One credit is required each year
   Grade 9 9-10 Physical Education
   Grade 10 9-10 Physical Education
   Grade 11 11-12 Physical Education
   Grade 12 11-12 Physical Education

F. Financial Literacy 1 term required (1 credit)
   Grades 9-12

II. Additional Requirement
CPR

III. Electives
All electives are given one credit per term unless otherwise stated in this booklet. All students taking electives should make sure that teacher's approval and/or prerequisites have been satisfied.

IV. Retaking a Required Course
Required courses that are not passed must be retaken as soon as it can be arranged. It is the student's responsibility to review his/her credit status and arrange, with the counselor, plans to resolve any credit deficiencies that may exist.

GRADE POINT AND CLASS RANK

In determining a student's grade point and class rank, the grading system and its numerical equivalent are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.667</td>
</tr>
<tr>
<td>B+</td>
<td>3.333</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.667</td>
</tr>
<tr>
<td>C+</td>
<td>2.333</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.667</td>
</tr>
<tr>
<td>D+</td>
<td>1.333</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>.667</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

Course Requirements for Admission to Iowa's Regent Universities
(Iowa State University, University of Iowa, University of Northern Iowa)

To encourage you to get the most out of your high school experience and to ensure that you are academically well prepared for college study, the Iowa’s Regent Universities have established a set of course requirements for admission. By meeting these requirements, you will satisfy not only the high school course requirements for admission to a state university in Iowa, but also the requirements for most other colleges and universities you might want to attend.

These requirements are just minimums for admission. You may need to take additional college prep courses in high school. For example, if you plan to pursue a degree in Engineering, it is recommended to take as many mathematic courses beyond second-year Algebra as you can during high school. Also, talk with your counselor to see if you can earn college credits during high school through Concurrent Credit Courses and Placement in College Credit/Post-Secondary Enrollment Options courses at nearby colleges.

The following chart outlines the high school course requirements for admission to each of Iowa’s Regent Universities. While the requirements are fundamentally similar, some differences exist that reflect the individuality of the three universities.
<table>
<thead>
<tr>
<th>Courses</th>
<th>Iowa State University</th>
<th>The University of Iowa</th>
<th>University of Northern Iowa</th>
<th>Optimum Recommendations for Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.</td>
<td>4 years, with an emphasis on the analysis and interpretation of literature, composition, and speech.</td>
<td>4 years, including one year of composition; may also include one year of speech, communication, or journalism.</td>
<td>4 years, with an emphasis on the communication skills of writing, reading and listening, and the analysis and interpretation of literature. In addition, courses in journalism and media literacy will be valuable. Extracurricular activities in debate, speech contest, newspaper and yearbook will further develop essential competencies.</td>
</tr>
<tr>
<td>Math</td>
<td>3 years, including one year each of algebra, geometry, and advanced algebra.</td>
<td>3 years, including two years of algebra and one year of geometry, for admission to the College of Liberal Arts and Sciences.</td>
<td>3 years, including the equivalent of algebra, geometry, and advanced algebra.</td>
<td>4 years, one in each year of high school. While advanced courses like calculus and statistics are good, it’s more important that you gain a complete understanding of advanced algebra and trigonometry.</td>
</tr>
<tr>
<td>Natural Science</td>
<td>3 years, including one year each from any of the following: biology, chemistry, and physics.</td>
<td>3 years, including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences.</td>
<td>3 years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience highly recommended.</td>
<td>4 years, one in each year of high school. To be better prepared, take at least one year each of biology, chemistry and physics. These can be taken in any order and may be taught productively in either a separate or an integrated fashion, depending on your school’s offerings.</td>
</tr>
<tr>
<td>Social Science</td>
<td>2 years for admission to the Colleges of Agriculture, Business, Design, Human Sciences, and Engineering. Three years for admission to the College of Liberal Arts and Sciences.</td>
<td>3 years, with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences.</td>
<td>3 years, including courses in anthropology, economics, geography, government, history, psychology, or sociology.</td>
<td>3 years is essential, but four is better. Take at least one year each of U.S. and world history. Additional courses in anthropology, economics, political science, psychology and sociology provide an important understanding of our political, social and economic institutions.</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2 years of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering. Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.</td>
<td>2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing - 3 years in a single language or two years each in two different languages.</td>
<td>Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.</td>
<td>4 years of single foreign language. By taking foreign language during all four years of high school, you’ll go beyond the basic skills and begin to use the language and reinforce your fluency.</td>
</tr>
<tr>
<td>Other Courses</td>
<td>Specific elective courses are not required for admission to Iowa State University.</td>
<td>Specific elective courses are not required for admission.</td>
<td>Two years of additional courses from the required subject areas, foreign languages, or fine arts.</td>
<td>Explore! Courses in the fine arts, performing arts, computers or technology will help round out your high school experience. Your future field of concentration or career may lie in one of those areas. Follow your interests, talents and the strengths of your school. Remember to choose courses with high academic standards.</td>
</tr>
</tbody>
</table>
ACCEPTED COURSES TO IOWA’S REGENT INSTITUTIONS
REGENT ADMISSION INDEX (RAI)

College freshman applicants who wish to enter the Regent Universities will be held to the Regent Admission Index (RAI) requirement. The RAI score is based upon four factors: ACT composite score, high school percentile class rank, high school cumulative grade point average, and the number of high school courses completed in the core subject areas of English, Mathematics, Science, Social Studies and World Language.

RAI CALCULATION:

\[
\text{RAI score} = (2 \times \text{ACT composite score}) + (1 \times \text{high school percentile class rank}) + (20 \times \text{high school cumulative GPA}) + (5 \times \text{number of years of RAI-approved high school courses completed in the core subject areas})
\]

Note: For purposes of calculating the RAI, ACT composite score has a top value of 36 (SAT scores will be converted to ACT composite equivalent); high school rank is expressed as a percentile, with 99% as the top value; high school GPA is expressed on a 4-point scale; and number of approved high school courses completed in the core subject areas is expressed in terms of years or fractions of years of study.

To calculate your own expected RAI, go to www.regents.iowa.gov/RAI.

Iowa high school graduates must achieve a Regent Admission Index (RAI) score of at least 245 and take the minimum number of required high school courses to qualify for automatic admission as freshmen to Iowa State University, the University of Northern Iowa, and the University of Iowa Liberal Arts and Sciences. Students who achieve a score less than 245 will be considered for admission on an individual basis.

The index places greater emphasis on your high school course selections. The more core courses you take the higher your RAI. Plan your high school courses carefully.

Courses that count as core courses for use in determining entry into the Regent Universities are not the same as those approved by the NCAA Clearinghouse.

The following courses will be accepted at the University of Iowa, Iowa State University and the University of Northern Iowa to meet minimum core course requirements.

Regent Admission Index (RAI) Core Course List

<table>
<thead>
<tr>
<th>World Language</th>
<th>English</th>
<th>Math</th>
<th>Science</th>
<th>Social Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish I</td>
<td>English I</td>
<td>Algebra I</td>
<td>Science Interactions</td>
<td>U.S. History</td>
</tr>
<tr>
<td>Spanish II</td>
<td>Advanced English I</td>
<td>Algebra II</td>
<td>Biology</td>
<td>World Cultures</td>
</tr>
<tr>
<td>Spanish III</td>
<td>English II</td>
<td>Pre-Calculus Functions</td>
<td>Chemistry I</td>
<td>World Studies</td>
</tr>
<tr>
<td>Spanish IV</td>
<td>Advanced English II</td>
<td>Geometry</td>
<td>Chemistry II</td>
<td>Civics</td>
</tr>
<tr>
<td>Spanish V</td>
<td>English III</td>
<td>Pre-Calculus I</td>
<td>Chemistry III</td>
<td>Mod. Amer. History-</td>
</tr>
<tr>
<td>French I</td>
<td>Advanced English III</td>
<td>Calculus I</td>
<td>Physics</td>
<td>1980s to Present</td>
</tr>
<tr>
<td>French II</td>
<td>Advanced Writing</td>
<td>Statistics</td>
<td>Principles of Engineering</td>
<td>Intro. to Psychology</td>
</tr>
<tr>
<td>French IV</td>
<td>Public Speaking</td>
<td></td>
<td>Anatomy &amp; Phys. II</td>
<td>Modern Social</td>
</tr>
<tr>
<td>French V</td>
<td>Journalism I</td>
<td></td>
<td>Astronomy</td>
<td>Problems</td>
</tr>
<tr>
<td></td>
<td>Journalism II</td>
<td></td>
<td>Environmental Science</td>
<td>Intro. to Sociology</td>
</tr>
<tr>
<td></td>
<td>Individualized Reading</td>
<td></td>
<td></td>
<td>Global Studies</td>
</tr>
<tr>
<td></td>
<td>Intro. to Literature</td>
<td></td>
<td></td>
<td>Regions of the World</td>
</tr>
<tr>
<td></td>
<td>Composition I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contemporary Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Film and Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7
FOR PROSPECTIVE STUDENT ATHLETES: Required NCAA Clearinghouse Courses

This list of West Delaware courses comes from the list of approved courses from the NCAA Clearinghouse. Most private colleges will look at other courses on an individual basis.

<table>
<thead>
<tr>
<th>English</th>
<th>Mathematics</th>
<th>Natural/Physical Science</th>
<th>Social Studies</th>
<th>Additional Courses accepted by NCAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Writing</td>
<td>Algebra I</td>
<td>Anatomy &amp; Physiology I</td>
<td>American Studies</td>
<td>French I</td>
</tr>
<tr>
<td>College Comp I</td>
<td>Algebra II</td>
<td>Anatomy &amp; Physiology II</td>
<td>Government</td>
<td>French II</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>Pre-Calculus Functions</td>
<td>Astronomy/Intro</td>
<td>Civics</td>
<td>French III</td>
</tr>
<tr>
<td>English I</td>
<td>Geometry</td>
<td>Biology I</td>
<td>Global Studies</td>
<td>French IV</td>
</tr>
<tr>
<td>English I/Advanced</td>
<td>Pre-Calculus I</td>
<td>Chemistry I</td>
<td>Intro. to Sociology</td>
<td>French V</td>
</tr>
<tr>
<td>English II</td>
<td>Statistics</td>
<td>Chemistry II</td>
<td>Intro. to Psychology</td>
<td>Spanish</td>
</tr>
<tr>
<td>English II/Advanced</td>
<td>Statistical Analysis</td>
<td>Chemistry III</td>
<td>Modern American</td>
<td>Spanish II</td>
</tr>
<tr>
<td>English III</td>
<td>Calculus I</td>
<td>Environmental Science</td>
<td>History 1980s-1990s</td>
<td>Spanish III</td>
</tr>
<tr>
<td>English III/Advanced</td>
<td></td>
<td>Science</td>
<td>Present</td>
<td>Spanish IV</td>
</tr>
<tr>
<td>Introduction to Literature</td>
<td></td>
<td>Physics</td>
<td>Modern Social</td>
<td>Spanish V</td>
</tr>
<tr>
<td>Public Speaking</td>
<td></td>
<td>Science Interactions</td>
<td>Problems</td>
<td></td>
</tr>
</tbody>
</table>

To check up to date information for the NCAA go to [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net). West Delaware code is 162700 (same as ACT).

REGISTRATION PROCEDURE

All students will register for the four terms of classes for 2019-2020 by using the following procedure:

1. During class meetings, all students will be given access to the Program of Studies and registration directions.
2. Students will follow the registration procedures in filling out their course requests.
3. Registration sheet needs to be signed by student’s guardian and returned to the High School Counseling Office.
4. High school students will register online for courses. Counselors will meet with 8th grade students for registration. Advisors will meet with 9th, 10th and 11th grade students. Any student can speak to counselors at any time for assistance with scheduling.

Special Notes:
- The registration process is designed to make every effort to accommodate the student in his/her request for courses. It should be understood that there is no way to determine in advance which periods of the day courses will be offered or which teacher will teach which course.
- Because class sizes and teacher assignments are based on the registration process, students will not be allowed to alter their course requests once the registration process is completed.
- It is the student’s responsibility to make sure he/she is successfully completing the requirements for graduation.
- Grade levels throughout this book are recommended unless other requirements apply.

SCHEDULE CHANGES

Students will not be allowed to alter their course requests once the registration process is completed unless extenuating circumstances exist. A two term course may not be dropped at the end of the first term of the course unless the student has the approval of the teacher, High School Counseling Office, and the principal. Students must be scheduled for all four blocks for each of the four terms in the 9, 10, 11th grades. The only exception will be those 12th grade students who are able to take 3 blocks and open campus should they qualify. Students who do not qualify for open campus must sign up for a 4th class. Students are encouraged to make all schedule changes for the 1st and 2nd terms before the first day of classes of the first term. Students are encouraged to make all schedule changes for the 3rd and 4th terms before the first day of classes of the 3rd term. Students will have the first three days of each term for schedule changes. Schedule changes after the start of the 1st and 3rd terms will be established by the High School Counseling Office for the following exceptions:
- After the start of the 1st and 3rd terms it is discovered that the student lacks the prerequisite, as stated in the Program of Studies, for a course.
- If a student fails the first term of a two term course he/she may change to a one term course.
- A student lacks a course that is required for college entrance and cannot get the needed course before graduation.
- A senior who has met the requirements for open campus in the previous grading period and is taking four classes may drop one of the classes and elect to take open campus. This must be done within the first six school days of the term.
- If it is discovered that a student is missing a course needed toward graduation.
AGRICULTURE, FOOD AND NATURAL RESOURCES (Agriculture Education)

Agriculture Exploration

Two Terms
Grades 9, 10 or instructor’s approval

Students will study a brief history and the current technology of the agriculture industry. Students will have a brief overview of animal/plant science, natural resources, and agricultural technology. Students will explore FFA and have leadership experiences. Students will also develop plans for their Supervised Agricultural Experiences and set goals for growth and development of those projects.

Aquaculture

One Term
Grades 10, 11 or 12

Aquaculture is a branch of agriculture that deals with the raising, care of, and the marketing of fish and other aquatic organisms. Students will learn to identify popular aquarium fish species, label external and internal parts of aquatic species, and learn about the environmental aspects and requirements to keep fish healthy. The student will spend class time conducting activities in the management and care of an aquarium.

Horticulture

One Term
Grades 10, 11 or 12

Introductory horticulture principles will be taught in this course. Students will learn the basics of plant science including parts of the plant, environmental requirements for plant growth, and career exploration in horticulture. Students will be involved in the selection, planting, and care of flower and vegetable plants. Students will be exposed to both interior and exterior landscape design and maintenance. Students will be involved in floral design projects as well as outdoor landscaping projects.

Wildlife and Conservation Management

One Term
Grades 10, 11 or 12

Wildlife and natural resources will provide the students with a history of our natural resources as well as the conservation of soil, water, forests, and air. Topics will also include wildlife management including hunting and fishing laws and safety.

Animal Science AGS:114 and AGS:101

NICC Concurrent Credit - 4 college credits
One Term
Grades 11 or 12

This course combines two NICC concurrent credit courses (AGS:114 and AGS:101) and students will receive a grade for each.
AGS:114 Survey of the Animal Industry - 2 college credits
AGS:101 Working with Animals - 2 college credits

This course will overview the animal science industry by exploring breeds, basic management, and farm animal marketing. Topics include beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. The course’s intent is to give practical experience working with dairy, beef, sheep, goats, horses, poultry, and companion animals. Additionally, students will interview successful business owners in each of these areas while touring their facilities.

Principles of Agronomy AGA:114

NICC Concurrent Credit - 3 college credits
One Term
Grades 11 or 12

Agronomy is the introductory principles of plant-soil-climate relationships in crop production, designed after a similar course at Iowa State University, and uses many of the same materials. The course introduces students to the principles of plant, soil, and climate relationships in crop production. Areas emphasized in the course include plant structure and growth, genetics, reproduction, and integrated pest management. Students will take an in depth look at the life cycle of plants and plant classification.

Agricultural Occupation Employment Experience (AOEE)

Pre- or Co-requisite Agriculture Business Management
Terms 1, 2, 3, or 4 or full year
15 hrs/wk on the job required
One credit per term
Grade 12

Placement will allow students an opportunity to apply skills and knowledge obtained in school to future careers. A contract will be drawn up between the student, instructor, parent/guardian, and AOEE station supervisor. Placement will be on an agri-
business, farm, or a personal relations job in the Manchester area. It is recommended that a student seek a work station outside that of the family or close relative unless school administrative approval is granted. The student is to use this time as a learning experience and not as a “hired hand.” Records will be kept as well as any other assignments deemed necessary by the instructor. See instructor as soon as possible if interested.

Agriculture Business Management Two Terms Grade 12

Agriculture Business Management is an overview of the farm management process and the process of farm decision making. Instruction includes a study of basic management concepts, government policy, economic principles, budgeting, accounting, finance, risk management, factors of production and marketing. The basic principles of record keeping, budgeting, year-end analysis, enterprise analysis, and tax management will also be vital in this course. Students will learn how banks look at businesses to evaluate their profitability and how to adequately prepare financial reports required by financial institutions in order to maximize loan success.

Post-Secondary:
Community College: A list of articulated courses, where the student will earn high school credit upon completion of the course, and college credit upon meeting the college’s requirements, are available upon request. WD courses serve as a solid foundation for community college courses, leading to an associate of arts degree.
Four-Year College: WD courses serve as a solid foundation for future course work in agriculture leading to a bachelor's degree in animal science, horticulture, natural resources, communications, or mechanics.
Future Jobs (after post-sec. ed.): Floral designer, livestock herdsperson, welder, veterinary, forester, DNR, turf and landscape designer/mgt., food technology, scientist, broadcasting, journalism.

APPLIED SCIENCES, TECHNOLOGY, ENGINEERING AND MANUFACTURING (Industrial Technology)

General requirements and fees:

1. No shop fees are charged for any Industrial Technology courses.
2. There is no charge for required projects in a first-level course. Students will be required to pay for any materials and supplies they use on any activities that go beyond the general requirements of the course. This could include repairs for cars, the cost of lumber, or metal in an advanced level course.

Introduction
Recommended course sequence for General Mechanics, Engineering Related, Manufacturing, Technical Service, and Construction.

<table>
<thead>
<tr>
<th>TECHNOICAL SERVICE</th>
<th>CONSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses: (suggested time frame)</strong></td>
<td><strong>Courses: (suggested time frame)</strong></td>
</tr>
<tr>
<td>Electricity (9/10/11/12)</td>
<td>Drafting I (9/10)</td>
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<td></td>
<td>Cabinet Making (9/10/11/12)</td>
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<td>Basic Carpentry (9/10)</td>
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<td></td>
<td>Woodworking (10/11)</td>
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<td></td>
<td>Wood Production (9/10/11/12)</td>
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</table>

<table>
<thead>
<tr>
<th>Immediate employment skills:</th>
<th>Immediate employment skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical assembler</td>
<td>Carpenter</td>
</tr>
<tr>
<td>Residential electrician with supervision</td>
<td>Roofer with supervision</td>
</tr>
<tr>
<td>Service technician</td>
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</tbody>
</table>

**Post-Secondary:**
WD courses serve as a solid foundation for future work in Drafting leading to a diploma, Associate of Arts degree or a four year Bachelor’s degree.

**Future jobs (after post-sec. edu.):**
Auto Electrical Systems Computer Technician
Specialist Robotics Technician
HVAC Technician Telecommunications
Electronics Maintenance Technician
Electronics-Biomedical HVAC Technician
<table>
<thead>
<tr>
<th>GENERAL MECHANICS</th>
<th>ENGINEERING RELATED</th>
<th>MANUFACTURING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Courses: (suggested time frame)</strong>&lt;br&gt;Exploring Technology (9/10)&lt;br&gt;Auto Ownership (10)&lt;br&gt;Auto Technology I (10/11)&lt;br&gt;Auto Technology II (10/11)&lt;br&gt;Auto Technology III (10/11)</td>
<td><strong>Courses: (suggested time frame)</strong>&lt;br&gt;Drafting I (9/10)&lt;br&gt;Drafting II (11/12)&lt;br&gt;CAD Drafting (9/10/11/12)&lt;br&gt;CAD Architectural/Solid Modeling (9/10/11/12)</td>
<td><strong>Courses: (no suggested time frame)</strong>&lt;br&gt;Intro to Stick Welding&lt;br&gt;Intro to MIG Welding&lt;br&gt;Basic Gas Metal Arc Welding&lt;br&gt;Shielded Metal Arc Welding&lt;br&gt;&amp; Flame &amp; Plasma Cutting&lt;br&gt;Industrial Welding&lt;br&gt;Intro to Stick Welding&lt;br&gt;Drafting II (11/12)&lt;br&gt;CAD Drafting (9/10/11/12)&lt;br&gt;CAD Architectural/Solid Modeling (9/10/11/12)</td>
</tr>
<tr>
<td><strong>Immediate employment skills</strong>&lt;br&gt;Entry level auto technician with supervision</td>
<td><strong>Immediate employment skills:</strong>&lt;br&gt;Entry level draftsman with supervision</td>
<td><strong>Immediate employment skills:</strong>&lt;br&gt;Sheet metal fabricator&lt;br&gt;Cabinet making&lt;br&gt;Wood production&lt;br&gt;Welder with supervision&lt;br&gt;Finish carpentry</td>
</tr>
<tr>
<td><strong>Post-Secondary:</strong>&lt;br&gt;WD courses serve as a solid foundation for future work in General Mechanical leading to a diploma articulated with NICC.</td>
<td><strong>Post-Secondary:</strong>&lt;br&gt;WD courses serve as a solid foundation for future work in Drafting leading to a diploma, Associate of Arts degree or a four year Bachelor’s degree in many areas of engineering.</td>
<td><strong>Post-Secondary:</strong>&lt;br&gt;WD courses serve as a solid foundation for future work in Manufacturing Technology leading to a diploma, Associate of Arts degree or a four year Bachelor’s degree.</td>
</tr>
<tr>
<td><strong>Future jobs (after post-sec. edu.):</strong>&lt;br&gt;Auto Mechanic&lt;br&gt;Diesel Mechanic&lt;br&gt;Auto Collision Technician&lt;br&gt;Claims Operation Specialist&lt;br&gt;Service Manager</td>
<td><strong>Future jobs (after post-sec. edu.):</strong>&lt;br&gt;Architectural Engineer&lt;br&gt;Civil Engineer&lt;br&gt;Structural Engineer&lt;br&gt;Mechanical Engineer&lt;br&gt;HVAC Technician</td>
<td><strong>Future jobs (after post-sec. edu.):</strong>&lt;br&gt;Job Shop Machinist&lt;br&gt;Tool and Die Maker&lt;br&gt;Welding Technology&lt;br&gt;Manufacturing Technician&lt;br&gt;Manufacturing Management&lt;br&gt;Construction Management</td>
</tr>
</tbody>
</table>
Auto Ownership

This class will teach students very basic maintenance tasks associated with a vehicle such as checking underhood fluid levels, greasing joints, tire care, and other tasks that will help extend the life of their vehicle. Students will also learn about researching, purchasing, and insuring a vehicle. Access to a vehicle is helpful, but not required.

**Autos I AUT:102**
Introduction to Automotive Technology
NICC Concurrent Credit - 1 college credit

This class is a prerequisite for Autos II & III. Autos I introduces safety practices, an overview of systems that are part of the Automotive Technology curriculum, and shop tools and diagnostic equipment used throughout the program. Access to a vehicle is helpful, but not required.

**Autos II AUT:123**
Applied Automotive Basics I
NICC Concurrent Credit - 4 college credits
Prerequisite: Autos I (Introduction to Automotive Technology)

Information and practical experiences in the basic areas of automotive repair will be covered in Autos II with emphasis on areas expected to be taught in a high school industrial arts program. Also serves as an overview of automotive systems if you desire an introduction to automotive repair. Access to a vehicle is helpful, but not required.

**Autos III AUT:124**
Applied Automotive Basics II
NICC Concurrent Credit - 3 college credits
Prerequisite: Autos I (Introduction to Automotive Technology)

This course provides students with information and practical experience for the basic areas of automotive repair. The course will also serve as an overview of automotive systems for students who desire an introduction to automotive repair. Access to a vehicle is helpful, but not required.

**CAD Drafting**

CAD Drafting will be taught entirely on a personal computer using the AutoCAD and Solidworks programs. The class will focus on learning the basic functions and commands of each program. AutoCAD will be used to draw the floor plan and front view to a house and Solidworks will be used to create a scale model of an object.

**CAD Architectural**
Prerequisite: CAD Drafting

CAD Architectural will be a combination of computer drawings, color renderings and scale models constructed in class. The course will deal with considerations of space and design of structures and the surrounding environment. Elements of good design will be evaluated and applied to projects.

**CAD Solid Modeling**
Prerequisite: CAD Drafting

CAD Solid Modeling is geared for previous CAD students that want to take it to the next level. Students will learn how to use Solidworks to create products in full 3-D. Students will design a new concept, or improve upon an existing one, which could include prototyping of their design. Businesses such as Henderson Mfg. use this program in their daily operations, so whether you plan on going directly to the working world, or you are going to college to become an engineer, this class is for you.

**Drafting I**

Drafting I is an in-depth study in drafting using mechanical hand equipment and drawing tables. The following areas will be covered: Equipment usage, lettering, geometric construction, orthographic projection, and auxiliary views.
**Drafting II**
Prerequisite: Drafting I

One Term
Grades 9, 10, 11 or 12

Drafting II is an in-depth study in drafting using mechanical hand equipment on drawing tables and computers for 3-D drawings. The following will be covered: pictorial drawing (isometric and oblique), dimensioning and notes, and drawing a house design of your choice.

**Electricity**

One Term
Grades 9, 10, 11 or 12

Electricity is an introduction to electricity and electronics. It is designed to help the student use, maintain and understand electrical equipment that is used at home and/or the farm. Course content will include safety, sources of electricity, magnetism, conductors, insulators, series and parallel circuits and house wiring. A wiring panel with both single pole and 3-way switch circuits will be constructed. Troubleshooting and repair of an electrical or electronic device will be required.

**Exploring Technology**

One Term
Grades 9, 10, 11 or 12

This beginning course is designed to give students a taste of what our department has to offer. Some areas covered will include engineering and transportation over land, air, and water. Hands-on projects will include building a hovercraft, water rocket, paper airplane design, toothpick towers, and others.

**Introduction to MIG Welding**

One Term
Grades 9, 10, 11 or 12

This course is designed to give students a basic understanding of metalworking and welding with a MIG welder. Students will be asked to learn basic shop skills, cutting metal with a plasma cutter, welding joints in position with a MIG welder, as well as learning basic concepts of constructing parts from a print assigned. Students will also learn what is expected of them in the industries if they decided to pursue a career in welding/metalworking. This class is one of the first classes in the strand to becoming a skilled welder.

**Introduction to Stick Welding**

One Term
Grades 9, 10, 11 or 12

This course is designed to give students a basic understanding of metalworking and welding with a stick welder. Students will be asked to learn basic shop skills, cutting material with a plasma cutter, and welding different joints together with a stick welder. Students will also learn what is expected of them in the industries if they decided to pursue a career in welding/metalworking. This class is one of the first classes in the strand to becoming a skilled welder.

**Introduction to Fabrication**
Prerequisite: Introduction to MIG Welding and Industrial Welding/Weld Safety

One Term
Grades 10, 11 or 12

This course is designed to teach students the importance of prints and construction of product. You will learn different tools as well as construct different projects that are recommended by the instructor.

**Industrial Welding WEL:110 and WEL:228**

NICC Concurrent Credit - 3 college credits
Prerequisite: Introduction to MIG Welding

One Term
Grades 9, 10, 11 or 12

This course combines two NICC concurrent credit courses (WEL:110 and WEL:228) and students will receive a grade for each. WEL:110 Welding Blueprint Reading - 2 college credits
WEL:228 Introduction to Welding, Safety & Health - 1 college credit

Welding Blue Print Reading introduces students to the concepts and practice of blueprint interpretations as needed by welders in an industrial setting. Emphasis is on the basics of interpretation and applications in specific situations.

Safety and safe practices in the welding lab will be enforced and lined up with OSHA standards as set to AWS standards.
By completing Industrial Welding and Basic Gas Metal Arc Welding you will receive the Career Pathway Certificate: Welding – GMAW through NICC.

**Basic Gas Metal Arc Welding WEL:433**
NICC Concurrent Credit – 3.5 college credits
Pre- or Co-requisite: Industrial Welding/Weld Safety
Two Terms
Grades 10, 11 or 12

Basic Gas Metal Arc Welding (GMAW) is an introductory class studying Short Circuit Gas Metal Arc Welding and other related processes. Topics such as process variation, welding in various positions, principle of operation, shielding gasses, and wires will be studied. Safety and practical application of these welding processes will be stressed.

The lab provides safe practice in GMAW procedures to meet skill requirements for AWS certifications. Job sheets are used to guide learning activities and to provide orderly and productive learning experience.

By completing Industrial Welding and Basic Gas Metal Arc Welding you will receive the Career Pathway Certificate: Welding – GMAW through NICC.

**Shielded Metal Arc Welding and Flame and Plasma Cutting WEL:427 and WEL:434**
NICC Concurrent Credit – 4.5 college credits
Pre- or Co-requisite: Industrial Welding/Weld Safety
Two Terms
Grades 10, 11 or 12

This course combines two NICC concurrent credit courses (WEL:427 and WEL:434) and students will receive a grade for each.

WEL:427 Shielded Basic Arc Welding (SMAW) – 3 college credits
WEL:434 Flame/Plasma Cutting Fundamentals – 1.5 college credits

This is an intermediate course that is designed to give students an idea of what is expected of them as a professional stick welder. Topics will cover proper heat, polarities, and students will be weld tested on D 1.1 AWS. Tests will be given in position 1G and 2G with 7018 or 6010 rods. Students will also be required to setup and operate different processes in cutting applications.

**Basic Carpentry**
One Term
Grades 9, 10, 11 or 12

A residential-based carpentry program where students receive hands-on training in the proper use and maintenance of typical construction hand and power tools. Students will focus on building small structures as sheds to apply what they learn in class.

**Woodworking**
One Term
Grades 9, 10, 11 or 12

Prerequisite: Basic Carpentry

Students will be tasked with designing and building a project with a door or drawer. While the projects need not be large, they will teach basic furniture making techniques. Students may have the option of building a project for a teacher as well.

**Cabinet Making**
One Term
Grades 9, 10, 11 or 12

Prerequisite: Basic Carpentry

Students will learn how to build cabinets like those found in kitchens and bathrooms. These techniques can be used to make items such as entertainment centers and gun cabinets as well.

**Wood Production**
One Term
Grades 9, 10, 11 or 12

Prerequisite: Woodworking or Cabinet Making

Students will mass produce a product to sell to family/friends or will produce a large project for a customer. Students will not be required to pay for materials for these projects.
ART

3-Dimensional Multimedia Art

3-Dimensional Multimedia Art is the study of art through height, width, and depth. This also includes form versus function. Students will learn about sculpture in the round, relief sculpture (both high and low) and statues. A multitude of media will be incorporated including drawing and painting medium. Students will be working together on larger scale group projects as well and individual assignments. Many project outcomes will be abstract but incorporate representational content. Students will be given written assignments and exams. This is NOT a ceramics class and clay will not be covered in this course.

Ceramics I

Offered in alternating years: 2019-2020 and 2021-2022 school year

This course will offer a combination of the best of both ceramics and sculpture processes. The student will learn about clay as a material used for both potting and construction in a sculptural sense. It will include hand-building techniques, use of the potter's wheel and clay as a sculptural medium, creating busts and nonobjective abstract pieces. The student may also have the opportunity to explore other aspects of sculpture - creating pieces using styrofoam, wood, and mixed media.

Ceramics II

Offered in alternating years: 2019-2020 and 2021-2022 school year

Prerequisite: Ceramics I

Using learned skills from Ceramics I, Ceramics II will allow students to expand their 3-D skills further. Students will be required to construct hand-built projects as well as working on the potter’s wheel. Students may have the opportunity of incorporating other medium into their work. Students will be given written assignments and exams.

Drawing I

Drawing I is the foundation upon which all art forms depend. Emphasis is placed on contour line, the use of perspective, shading, and a variety of rendering techniques. Assignments will include working with a variety of drawing mediums, papers, and approaches. Students can expect to study still life, landscape, life drawing, and architecture for regular supplemental assignments. A sketch book is required.

Drawing II

Prerequisite: Drawing I

Drawing II will expand on learned skills from Drawing I, and elaborate on individuality of students interests. Students will study different artists’ styles and movements in history. Students will work toward putting together a portfolio of their work from Drawing I and Drawing II. Written exams and other outside work will be required. A sketch diary is required.

Foundations in Art I

Foundations in Art I is designed as an introductory level course in art. All art classes offered in the current school year may be covered. In addition, the course provides foundational instruction in design, processes, art history, art appreciation, and exposure to a variety of media applications.

Foundations in Art II

Prerequisites: Foundations in Art I

Foundations in Art II is designed to expand upon the Foundations in Art I class. Students will be introduced to a deeper concentration of artist enrichment towards greater knowledge of the concepts in art through hands on application of media, the study of fundamentals of design, critique and evaluation of art, and discussions in art theory. All art classes currently offered may be covered except photography, computer graphics, and ceramics.
**Painting I**
Suggested Prerequisite: Drawing I

Painting I will introduce students to a variety of painterly processes in watercolor, tempera, and acrylic. Students will experience the mediums through basic techniques of application and expand to more sophisticated handling. Processes covered will include; water blending and mixing, wet on wet, wet on dry, glazing, and more. Students will possibly work from still-life, landscape, and architectural subject matters. Students should be prepared to draw, take notes, and analyze professional and student art work. Written exams will be required.

**Painting II**
Prerequisite: Painting I

Painting II will provide students with a more in-depth opportunity to explore painting mediums; watercolor, egg tempera, acrylic, and oil will be considered. They will explore blending and mixing colors, working from limited palate, and adding texture to the painting surface. Students will be painting on a variety of surfaces, including building their own stretched canvas. Students will be critiquing art work both orally and in writing. Students can expect written exams, as well as other outside work.

**Photoshop I**
Prerequisite: Foundations in Art I

Covers basic design concepts and color principles for visual communication. Conceptual and analytical thinking skills are applied through a series of design projects and discussions. Presents introductory principles of typographic composition, structure, and the basics of design. Explores visual elements to communicate ideas. The programs explored include the current versions of Adobe Illustrator and Photoshop. Students will be using the MAC computer system. Students may use their own device during certain units.

**Photoshop II**
Prerequisite: Photoshop I

This is a continuation of Photoshop I using learned skills and techniques to study and explore approaches to illustration and integration of type and graphic images used towards solving class problems and designing projects for school and community. The programs explored include the current versions of Adobe Illustrator and Photoshop. Students will be using the MAC computer system. Students may use their own device during certain units.

**Art Appreciation ART:101**

This visual literacy class explores art through the ages from Medieval Art to Present Modern Expressionism. Students will learn how to critically evaluate art work in both a written and oral manner while building a sound understanding of their own aesthetic properties. Students must define vocabulary words to be used towards group discussions and active participation in activities using learned knowledge is a must. Field trip required.

**Photography**
Offered in alternating years: 2020-2021 and 2022-2023 school year

In this class students learn basic knowledge and operations on a SLR manual film camera. Students will wind and develop their own black/white film. They will create photo prints in the dark room and put together an Artist's portfolio. The class will include reading, lectures, discussions, and studying credited photographic works. All learned knowledge can be applied to any film or digital camera. Creative expression is stressed throughout the course. Students may use their own device during certain units.
## Recommended Courses for Careers in:

- Accounting, Finance, Marketing, Business Management & Administration

**Suggested course sequence**

- Global Business (9/10/11)
- Financial Literacy (9/10/11/12)
- Marketing (10/11)
- Accounting I ACC:115 (10/11)
- Accounting II (11/12)
- Intro. to Entrepreneurship (11/12)
- Career Exploration (11/12)

### Immediate employment skills:

- Entry-level bookkeeping with supervision, payroll, sales, marketing, retail sales, and receptionist

### Post-secondary:

- Community college: WD courses serve as a solid foundation for future coursework in accounting, finance, marketing, or management leading to an Associate of Arts degree.

### Four-year college:

- WD courses serve as a solid foundation for future coursework leading to a bachelor’s degree in accounting, finance, marketing, and business management & administration.

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## Recommended Courses for Careers in:

- Information Technology, Business Specialist, A/V Technology & Communications

**Suggested course sequence**

- Multimedia (9/10)
- Global Business (10/11)
- Marketing (10/11/12)
- Intro. to Entrepreneurship (11/12)
- Career Exploration (11/12)

### Immediate employment skills:

- General Office, word or data processing, receptionist, sales, marketing, and retail sales

### Post-secondary:

- Community college: WD courses serve as a solid foundation for future coursework in information management and technology leading to an Associate of Arts degree.

### Four-year college:

- WD courses serve as a solid foundation for future coursework leading to a bachelor’s degree in computer applications or information management, or information technology.

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### Financial Literacy

**One Term**  
**Required**  
**Grades 9, 10, 11 or 12**

Students will examine savings, understanding investments, wealth building and college planning, credit and debt, consumer awareness of the power of marketing on buying decisions, financial responsibility and money management, insurance, risk management, income, and career decisions, different types of insurance coverage and buying, selling, and renting advantages and disadvantages relating to real estate.

### Global Business

**One Term**  
**Grades 9, 10, 11 or 12**

We live and work in a global economy. Business has become globalized; economies and markets around the world are interconnected and more interdependent than ever before. Learn how to think about business in a global context; understand why and how nations do business with each other. Select a country and a company to study, and learn how they interact in the world economy. Topics in this project-based course focus on basic business and economic concepts, economic systems, business structures, cultural awareness, communication skills, international trade, and engaging with learners from other countries and cultures.

### Multimedia

**One Term**  
**Grades 9, 10, 11 or 12**

Multimedia is content created using a combination of other content forms such as text, audio, still images, animations, and video. Design, develop, create, and test your own self-generated digital learning. Technology has changed our relationships with information and given us access to multimedia resources that were inconceivable just a few years ago. Creativity, originality, and systemic thinking are necessities for success in today’s global work setting. Topics covered in this course include: Microsoft PowerPoint presentations & Movie Maker, screencasts, podcasts, promotional print media, Prezi, various Web 2.0 applications, and creating your own career portfolio website.

### Accounting I ACC:115

**Introduction to Accounting**  
**NICC Concurrent Credit - 4 college credits**  
**Required: ALEKS placement score of 15 or higher**  
**Two Terms**  
**Grades 10, 11 or 12**
Accounting I is the language of business and is an essential part of all business activities. Accounting I prepares you to be an educated business professional and informed consumer, regardless of your chosen career path. Accounting I provides a real-world, comprehensive understanding of Generally Accepted Accounting Principles (GAAP) to make informed financial decisions. Whether you start your own service business, work in a corporation or in the financial field, understanding the accounting cycle is a must.

In this hands-on course you’ll learn to analyze, journalize and post transactions, determine net income or loss, prepare financial statements, reconcile a bank statement, prepare a payroll, calculate payroll and quarterly taxes, calculate depreciations, and more! Microsoft Excel 2013, Automated Accounting Software, and real-world business simulation(s) will be used throughout the course. Recommended for students wishing to pursue a career directly out of high school, or continuing on with a two- or four-year degree in any business-related program.

**Accounting II**
Prerequisite: Accounting I

Accounting II expands on what the numbers tell you and how to make managerial decisions based on those projections. Learn to analyze financial records. How do I estimate next year’s profit or a 3-year sales forecast? Students planning to major in any area of finance or business or who are considering managing or owning a business should seriously consider Accounting II. A strong working knowledge of spreadsheets is vital to successful accounting employment. This knowledge also provides a sound basis for additional work at the post-secondary level in this area.

**Marketing**

Marketing surrounds us and influences our lives every day! The development of new marketing technologies, digital media, and emerging economies continually changes how marketing is conducted in the global market place. When you buy a product or use a service you are touched by marketing. If you are fascinated by human behavior, like developing new ideas, and promoting new products or services to meet consumers’ wants and needs, then Marketing is for you! Whatever your career path, be it with an international corporation, a non-profit organization, or self-employment, marketing knowledge and skills are essential for your success.

**Pre-Employment Strategies SDV:153**
NICC Concurrent Credit - 2 college credits

The course provides a basic introduction to skills necessary for an entry-level employment position. Networking with local employers will be a key component. A work performance rating and a National Career Readiness Certificate™ will be awarded based on results of WorkKeys® testing. These certifications will be recognized in interviewing and compensation practices of some local employers. Options for continuing education through NICC programs will be stressed. Students may also choose to enter directly into the workforce after successfully completing the course.

**Career Exploration**

Career Exploration is a school-business partnership designed to give students the opportunity to learn, work, and experience a real career in which they are interested through placement in a local business. A training plan and contract will be drawn up between the student, instructor, parent/guardian, and the work site supervisor. Students will complete class assignments, a time log, a reflection journal, a final project related to their work experience, and be evaluated at the end of each term. Students will complete a career/job survey prior to class to facilitate work site placement by the start of class. Students will not be placed at a work site owned or supervised by a family member or close relative. Students currently employed/supervised in a position not overseen by a family member may also enroll. In order to earn credit, students are required to attend school and the work site on a regular basis.

*This class requires students to travel to the assigned work site. Students are responsible for their own transportation. Parental approval is required.*
**Introduction to Entrepreneurship**

How to really start your own business is what this course is all about! Become an entertainment entrepreneur utilizing this interactive, highly visual, virtual Sports & Entertainment Franchise simulation. Research, plan, and book concerts and sports events to increase your revenue, set prices and inventory levels, promote events using social media, manage show operations, hire and schedule staff, and analyze financial statements to make profitable business decisions. This class introduces real-world concepts in business finance, entertainment marketing, management, and entrepreneurship. Create your own business plans utilizing SCORE® and SBA® business planning materials. See if you have what it takes to become a successful entrepreneur. Can you put all the pieces together to create a viable, profitable business venture?

**DELAWARE COUNTY (DelCo) STEM BEST**

DelCo BEST is a community-based initiative program which allows students the opportunity to partner with local businesses to solve problems within our community. Students may identify needs they observe in their community and pitch them to business partners, or the community may identify needs and pitch them to the students. This course will be taught in a flexible setting and curriculum will be driven by the needs of student initiatives. Students will earn 1 elective credit per term based on competency in the following Career Readiness skills: Communication, Critical Thinking/Problem Solving, Collaboration, Flexibility/Adaptability, and Productivity/Accountability. Grading for this course will be Pass-Fail.

*This class requires students to travel off school grounds to the assigned worksite and meeting locations. Students are responsible for their own transportation. Parental approval is required.

**DRIVER EDUCATION**

Driver Education

Summer Program

.5 credit

Class Fee: $ To Be Determined

A non-refundable deposit of $50.00 is required

The purpose of the Driver Education course is to teach the fundamentals of safe driving through classroom and behind-the-wheel experiences. To enroll in the course, a student must have a valid instruction permit, have completed 8th grade, and be 14 years old.

A student must satisfactorily complete 6 hours of behind-the-wheel instruction and 30 hours of classroom instruction to receive a completion certificate for the course.

A separate registration for the Driver Education course will be held during the second semester.
ENGLISH LANGUAGE ARTS

Each student must complete eight terms of English Language Arts before he/she is permitted to graduate from West Delaware High School. Students planning to go to a two or four-year college should take additional classes. Students are expected to fulfill the 9-12 requirements by successfully completing:

1. English I or Advanced English I
2. English II or Advanced English II
3. English III or Advanced English III
4. Two elective English credits

Recommended classes per post-graduation options:

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<thead>
<tr>
<th>HS Diploma</th>
<th>Two-Year College</th>
<th>Four-Year College</th>
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<tbody>
<tr>
<td>English I</td>
<td>English I</td>
<td>English I or Advanced English I</td>
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<tr>
<td>English II</td>
<td>English II</td>
<td>English II or Advanced English II</td>
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<tr>
<td>English III</td>
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<td>English III or Advanced English III</td>
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<tr>
<td>Two Electives</td>
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<tbody>
<tr>
<td>Contemporary Literature</td>
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<td>Advanced Writing</td>
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<tr>
<td>Practical Writing and Career Exploration</td>
<td>Creative Writing</td>
<td>Composition I (College Credit)</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>Journalism</td>
<td>Intro. to Literature (College Credit)</td>
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<td></td>
<td>Practical Writing and Career Exploration</td>
<td>Journalism</td>
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<td>Public Speaking</td>
<td>Public Speaking</td>
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<td>Film and Literature</td>
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<tr>
<th>Other Options</th>
<th>Other Options</th>
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<tr>
<td>Creative Writing</td>
<td>Advanced Writing</td>
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<td>Journalism</td>
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Special Note: Students failing a required English class will reschedule the class at the next available term.

Core English Classes:

English I

English I is designed to improve reading comprehension and writing skills. Students will read a variety of fiction and nonfiction. Other skills include vocabulary development, research, communication, and process writing.

Advanced English I

Advanced English I is designed to challenge students to critically analyze short stories, novels, an epic, and nonfiction selections through class discussion and essay writing. Other skills include vocabulary development, research, and process writing. Note: Students will move through texts at an advanced pace and need to be self-motivated.

English II

Prerequisite: English I

English II is designed to improve reading comprehension and analysis, writing, communication, and research skills. Students will read various fiction and nonfiction selections, deliver a persuasive speech, and use the writing process to improve their writing skills. Specifically, students will write journals, a reflective essay, and a research paper while focusing on grammar, usage, and mechanics.
**Advanced English II**

Prerequisite: English I

Two Terms

Grades 9, 10, 11 or 12

Advanced English II is designed to challenge students to think critically and improve discussion and writing skills. Students will be expected to move through readings at an advanced pace and be expected to read and write extensively outside of class. Throughout the course, students will read various fiction and nonfiction selections, deliver a persuasive speech, and use the writing process to improve their writing skills. Specifically, students will write journals, a reflective essay, and a research paper while focusing on grammar, usage, and mechanics.

**English III**

Prerequisite: English II or Advanced English II

Two Terms

Grades 10, 11 or 12

English III is designed to challenge students to critically analyze classic American Literature pieces from Native American traditions to modern times through discussions, research, presentations, and various writings. Other skills include vocabulary development, grammar, speaking, listening, and the writing process.

**Advanced English III**

Prerequisite: English II or Advanced English II

Two Terms

Grades 10, 11 or 12

Advanced English III is designed as a project-based, challenging course that prompts students to critically analyze classic American Literature pieces. Works are drawn from Native American traditions to modern times and synthesized through discussions, research, presentations, and various writing opportunities. Other skills include vocabulary development, grammar, speaking, listening, and the writing process. Students will apply their findings from these classical texts to the world around them.

**Elective English Classes:**

**Contemporary Literature**

One Term

Grades 9, 10, 11 or 12

This elective course introduces students to contemporary fiction and non-fiction and encourages students to think critically in various formats, including discussion, projects, writing, and presentations. This course will provide a balance in student and teacher selected reading materials that represent popular issues and ideas.

**Practical Writing and Career Exploration**

One Term

Grades 9, 10, 11 or 12

Practical Writing and Career Exploration will allow students to improve their writing and communication skills through a variety of business-world documents (such as e-mails, memos, brochures, letters, process analysis, proposals, etc.) and presentations, and through writing instructions for a self-created model. Students will also research possible careers and write a resume.

**Public Speaking**

One Term

Grades 9, 10, 11 or 12

Public Speaking exposes students to a variety of communication experiences. Students will gain confidence in speaking situations ranging from radio broadcasting to digital presentations. Skills covered will include propaganda techniques, listening skills, vocal delivery, writing for a specific audience, and researching. No matter what a student’s previous speaking experiences have been, this class will help alleviate the stress of presentations.

**Journalism**

Two Terms (May take more than once)

Grades 10, 11 or 12

Journalism offers students the opportunity to produce the school yearbook and newspaper. Along with formal instruction, students will participate in a workshop approach in writing headlines, captions, and articles as well as perfecting their skills in design, desktop publishing, photography, etc. The ability to meet deadlines and the discipline to revise one’s own work are essential for success in this class.
<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>Prerequisite</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advanced Writing</strong></td>
<td>One Term</td>
<td>Prerequisite: English III</td>
<td>Grades 11 or 12</td>
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<td></td>
<td>Advanced Writing uses a workshop format to prepare students for two- and four-year college writing tasks. This class helps students gain confidence and proficiency through daily application of journaling, language arts skills, and practice in revision and proofing skills. Some literature study will be included as examples and for analysis. Students will maintain a portfolio of their work, juggle multi-task assignments, and practice time management.</td>
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<tr>
<td><strong>Creative Writing</strong></td>
<td>One Term</td>
<td>Prerequisite: English II</td>
<td>Grades 10, 11 or 12</td>
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<td>In Creative Writing, students will use the writing process to develop original pieces of fictional and nonfiction prose. After taking two pieces through the writing process, students will participate in an in-class writing workshop where they will evaluate the writing of peers and also have the opportunity to receive feedback on the piece they submit. Creative Writing is for students who enjoy writing and are willing to hone their craft through daily practice and the use of the writing process.</td>
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<tr>
<td><strong>Film and Literature</strong></td>
<td>One Term</td>
<td></td>
<td>Grades 11 or 12</td>
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<td>A high level of reading texts, film journal articles and film reviews will occur. Students will be required to be active participants in film viewings, discussion, and writings which will include their own reviews of films, analysis of the dramatic, cinematic, narrative aspects of films, and comparisons of literary works and their cinematic adaptations. This course will also implement technology, research of history, the use of Socratic seminars after film viewing, and student presentations. Students will become more knowledgeable and appreciative readers and more perceptive viewers of film through learning basic cinematic techniques that define different genres of film.</td>
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<tr>
<td><strong>NICC Concurrent Credit English Classes:</strong></td>
<td>Before enrolling in concurrent credit classes, it is recommended students take English III and Advanced Writing.</td>
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<tr>
<td><strong>Composition I ENG:105</strong></td>
<td>One Term</td>
<td>Required: Accuplacer writing score of 5 or ACT English score of 18</td>
<td>Grades 11 or 12</td>
</tr>
<tr>
<td>NICC Concurrent Credit</td>
<td>One Term</td>
<td>Highly Recommended: English III</td>
<td>Grades 11 or 12</td>
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<tr>
<td>NICC Concurrent Credit - 3 college credits</td>
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<td>A writing course that prepares the student for the types of communication and thought essential to academic and working-world success. The course focuses on writing as a process and is intended to help students identify and refine their own personal writing.</td>
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</tr>
<tr>
<td><strong>Introduction to Literature LIT:101</strong></td>
<td>One Term</td>
<td>Prerequisite: A minimum grade of C- in Composition I or an equivalent college-level course in Composition</td>
<td>Grades 11 or 12</td>
</tr>
<tr>
<td>NICC Concurrent Credit - 3 college credits</td>
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<td>This class uses college level literature to focus on the craft of short fiction, poetry, and drama. Students will work to improve their analytical skills of both established and recent literary texts through class discussions, journaling, and essay writing.</td>
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<tr>
<td><strong>Class Enrollment by Assignment Only</strong></td>
<td>Two Terms</td>
<td>Students will receive English elective credit</td>
<td>Grades 9, 10 or 11</td>
</tr>
<tr>
<td><strong>Language Arts Lab</strong></td>
<td>Two Terms</td>
<td>Students will receive English elective credit</td>
<td>Grades 9, 10 or 11</td>
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<td></td>
<td>Language Arts Lab is designed to improve reading comprehension and fluency. Students will participate in independent reading, choral reading, vocabulary study, and reading strategy practice throughout the semester. Students are assigned to this class based on assessment scores.</td>
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</tr>
</tbody>
</table>
FINANCIAL LITERACY

Financial Literacy
Required
One Term
Grades 9, 10, 11 or 12

Students will examine savings, understanding investments, wealth building and college planning, credit and debt, consumer awareness of the power of marketing on buying decisions, financial responsibility and money management, insurance, risk management, income, and career decisions, different types of insurance coverage and buying, selling, and renting advantages and disadvantages relating to real estate.

HEALTH

Health I
One Term
Grades 9, 10, 11 or 12

The primary aim of the health education course is to help students make knowledgeable decisions regarding health issues that will affect their present and future wellness.

The course will focus on the areas of Nutrition: food choices, food evaluation, dietary guidelines, and menu development; Environmental Health: physical and social, goal setting, and decision making; Substance Abuse: alcohol, tobacco, and other illegal drugs; and Reproductive Health and Decision Making. Other current health topics will be covered as time permits.

Health II
Prerequisite: Health I
One Term
Grades 10, 11 or 12

This course is designed to provide students with greater in-depth knowledge about health issues. The major content areas from Health I will be expanded on. Nutrition: menu planning, diet analysis, fitness plan development, and implementation; Health Careers and Community Health Resources; Safety and First Aid; Reproductive Health and Pregnancy Prevention.

HEALTH ACADEMY

The following courses are with the health occupations program offered through NICC and held online. Courses are offered in groupings of 3 courses per semester, but students have the opportunity to take less than 3 courses based on their interest. Students will receive 1 high school credit per Health Academy class per semester. 1 semester of completion of all Health Academy coursework equals 3 high school credits.

This class has the potential to require students to travel to the assigned location.

Nurse Aide HSC:172
One Semester
NICC Concurrent Credit – 3 college credits
Grades 11 or 12

Must have an Accuplacer Reading score of 44 or above
or an ACT reading score of 14 or above
***Students must be 16 years of age to attend clinical.

The 80-hour nurse aide course meets the training of The Omnibus Budget Reconciliation Act of 1987 (OBR) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe, effective resident/client care.

*Prerequisite Course for: NICC nursing clinical coursework and several other health programs.
* You will receive 3 college credits from NICC when you complete this course./ 80 hour Nurse Aide course

Introduction to Nutrition  PNN:270
One Semester
NICC Concurrent Credit - 2 College Credits
Grades 11 or 12

Emphasizes a practical knowledge of good nutrition and some knowledge of diet therapy. Includes a background of adequate and accurate information on basic nutritional needs of the body. Prerequisite(s): None

*Required course for: Nursing
*You will receive 2 college credits from NICC when you complete this course./ 32 hours.
Dosage Calculations PNN:200
One Semester
NICC Concurrent Credit – 1 college credit
Grades 11 or 12
Must have an ALEKS score of 15 or above. *(Effective Spring of 2018 students must have an ALEKS score of 15 or above; Accuplacer or ACT will no longer be used for placement.)*

Includes a review of fractions and decimals, conversions of metric, apothecary and household units and computations of drug dosages. The classification of drugs affecting each body system will be an integral part of this course.
*Required course for: Nursing
*You will receive 1 college credit from NICC when you complete this course./ 16 hours

Medical Terminology HSC:114
One Semester
NICC Concurrent Credit – 3 college credits
Grades 11 or 12
The study of medical terminology as the language of medicine with emphasis on word analysis, construction of definitions, pronunciations and spelling of medical terms. Prerequisite(s): None
*Required course for: Health Information Technology, Medical Assistant, Medical Laboratory Technician, Surgical Technology, Radiologic Technology
*You will receive 3 college credits from NICC when you complete this course./ 48 hours

Introduction to Health Occupations HSC:110
One Semester
NICC Concurrent Credit – 3 college credits
Grades 11 or 12
Provide an orientation to the institutions that make up our health care system. Exploration of our health care system and the ethical, legal, and safety issues that influence and regulate health practice and maintenance. Course includes exploration of health career pathways in therapeutic, diagnostic, health informatics, and support services.
*Support course for: Health Programs, Technical Elective
*You will receive 3 college credits from NICC when you complete this course./48 hours

HUMAN SERVICES (Family and Consumer Sciences)

Financial Literacy
One Term
Required
Grades 9, 10, 11 or 12
Students will examine savings, understanding investments, wealth building and college planning, credit and debt, consumer awareness of the power of marketing on buying decisions, financial responsibility and money management, insurance, risk management, income, and career decisions, different types of insurance coverage and buying, selling, and renting advantages and disadvantages relating to real estate.

Foods I
One Term
Grades 9, 10, 11 or 12
Students will learn to make wise food choices and plan nutritious and appealing menus according to the latest dietary guidelines. Students will learn basic culinary skills including: kitchen safety and sanitation, equipment and utensils, standard measurements and equivalents. Topics covered include: fruits, vegetables, grain products, quick breads, soups, salads, and dairy products.

Foods II
One Term
Prerequisite: Foods I
Grades 9, 10, 11 or 12
Students will build on knowledge and skills gained in Foods I. More advanced techniques will be explored and used in units such as pastries, yeast breads, and meat cookery. Students operate a small business called “Take and Bake” learning quantity cooking principles. Emphasis is placed on meal planning, and presentation in lab groups and also for the students’ families.

Housing, Interiors, and Furnishings
One Term
Grades 9, 10, 11 or 12
Students who are considering careers in interior design, real estate, the housing construction industry or just want to gain
personal knowledge on housing decisions, will benefit the most from this course. Included are the following areas of study: human needs and housing, housing and society, choosing a geographic location, comparing and contrasting types of dwellings, rental properties, home buying, exterior and interior construction, evaluating and drawing floor plans and using the elements and principles of design to furnish and decorate a home. Field trips to area homes and related businesses are included.

**Human Growth and Development**

One Term  
Grades 9, 10, 11 or 12

Topics include: Decision making skills, conception, abstinence/birth control, stages of prenatal development, complications during pregnancy, and the importance of proper nutrition and exercise during pregnancy. Footage of different child birthing methods is viewed along with understanding the different types of birthing facilities and health professional options. Development milestones from birth to one-year-old are explored.

**Hungry Hawk Café Management**

Prerequisites: Foods I and II  
One Term  
Grades 10, 11 or 12

With the skills gained in Foods I and II, students will plan and prepare, and serve a delicious luncheon meal for the public one day a week throughout the term. Students will rotate through the following positions: head cook, assistant cook, dining room manager, and server. Basic bookkeeping skills will be used to track spending, income, and profits.

**Introduction to Nutrition**

One Term  
Grades 10, 11 or 12

Students who want to know more about eating healthy or are interested in careers in the health care fields such as dietetics, nutrition, nursing and/or sports nutrition would best benefit from this course. Students will gain a practical knowledge of good nutrition and an introduction to diet therapy. Course includes units on the digestive system as well as each of the nutrient groups: carbohydrates, fats, protein, vitamins, minerals, and water. Nutrition in the life cycle: identifying the nutritional needs and recommendations during pregnancy, lactation, childhood and adult stages, along with diets for various medical conditions are also dealt with in this course.

Articulates DMACC course Introduction to Nutrition HCM231

**Parenting**

One Term  
Grades 9, 10, 11 or 12

84% of the people in the United States become parents at some point in their lives. This class will give you skills you need to be an effective parent, teacher, social worker, or any other career dealing with children. Topics include functions of the family, family structures, families in society, trends affecting our families, the importance of each parent’s role in the child’s life, how to encourage appropriate behavior and effectively deal with misbehavior. Students participate in the popular “Baby Think It Over” infant simulation. A final practical experience includes planning and implementing a one-week program for area preschoolers.

**Food Management Internship/Co-op**

Only two terms per year  
One credit per term  
Grade 12

Students will obtain a job in food industry in Manchester or the surrounding area to gain skills in the culinary field. They receive credit while possibly earning an income.

Students who successfully complete 6 courses in Foods and Nutrition will graduate with skills that allow them to enter the field of food production, service, management or related health occupations with training beyond the average high school graduate. This program of study directly leads to programs at the community college and some four year programs.
Every West Delaware Graduate is required to complete one course from each of the following levels:

- Concepts of Algebra I or Algebra I
- Concepts of Geometry or Geometry
- Concepts of Algebra II or Algebra II
- Statistical Analysis or Statistics

<table>
<thead>
<tr>
<th>High School Diploma and Two-Year College</th>
<th>Four-Year College</th>
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</thead>
<tbody>
<tr>
<td>Concepts of Algebra I</td>
<td>Algebra I</td>
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<tr>
<td>Concepts of Geometry</td>
<td>Geometry</td>
</tr>
<tr>
<td>Concepts of Algebra II</td>
<td>Algebra II</td>
</tr>
<tr>
<td>Statistical Analysis</td>
<td>Statistical Analysis or Statistics (NICC)</td>
</tr>
<tr>
<td><strong>Recommended Electives:</strong></td>
<td><strong>Recommended Electives:</strong></td>
</tr>
<tr>
<td>Pre-Calculus Functions</td>
<td>Pre-Calculus (NICC)</td>
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<td>Calculus I (NICC)</td>
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<td>Pre-Calculus Functions</td>
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**Concepts of Algebra I**  
Two Terms  
Grades 9, 10 or 11

The course will focus on algebra concepts including: graphing and solving linear equations, and solving systems of equations. Students will also identify various functions including linear, non-linear, exponential growth, and exponential decay.

**Algebra I**  
Two Terms  
Grades 9, 10, 11 or 12

This course will include the study of basic operations with whole numbers, integers and rational numbers; properties of number systems; solving simple and quadratic equations and inequalities; factoring polynomials; evaluating exponents and radicals.

**Concepts of Geometry**  
Two Terms  
Grades 9, 10 or 11

Concepts of Geometry will focus on the basic skills of Geometry including (but not limited to) the following topics: angles, polygons, circles, three dimensional figures, parallel lines, perpendicular lines and transformations.

**Geometry**  
Two Terms  
Grades 9, 10, 11 or 12

Geometry deals chiefly with plane figures, although the basic elements of Solid Geometry and Coordinate Geometry are included. Logical proof is used to justify familiar geometric formulas and relationships, and to develop new ones.

**Concepts of Algebra II**  
Two Terms  
Grades 9, 10, 11 or 12

This course will include the study of review topics from Concepts of Algebra I; the properties of Real Numbers; writing and solving simple equations and inequalities, systems of linear equations in two variables, and quadratic equations and inequalities. Also the algebra of polynomials, radicals, and basic trigonometry will be covered.

**Algebra II**  
Two Terms  
Grades 9, 10, 11 or 12

This course will include the study of the following functions: quadratic, polynomial, exponential, logarithmic, rational, radical and trigonometric. It will also include the study of sequences and series. To be successful, a student should have had a minimum grade of a C- in Algebra I.
### Pre-Calculus Functions

Prerequisite: Concepts of Algebra II or Algebra II

This course is for students seeking additional higher level math. The class will study various functions including: polynomial, trigonometric, exponential, and logarithmic. This course is intended for students who do not qualify or do not want to take college Pre-Calculus MAT:128 through NICC.

### Statistical Analysis

Prerequisite: Concepts of Algebra II or Algebra II

The purpose of this course is an introduction to the basic methods of statistical reasoning. The course will help the student develop the ability to summarize data, interpret data and draw conclusions based on the data. This course is intended for students who do not qualify or do not want to take college Statistics MAT:156 through NICC.

### Statistics MAT:156

Prerequisite: Algebra II (Recommended C- or above)

The purpose of this course is an introduction to the basic methods of statistical reasoning. The course will help the student develop the ability to summarize data, interpret data and draw conclusions based on the data.

### Pre-Calculus I MAT:128

Prerequisite: Algebra II (Recommended C- or above)

Prepares you for Calculus. Studies the nature of elementary functions and their role in mathematics by integrating a combination of algebra and trigonometry. Topics include the real number system, functions, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions, trigonometric identities, analytic trigonometry, systems of equations, and matrices.

### Calculus I MAT:210

Prerequisite: Pre-Calculus I

Gain an understanding of calculus and analytical geometry, differentiation, and applications of the analytic geometry, and differentiation.

### MUSIC

Concert Band, Mixed Chorus, Concert Choir, Bass Clef Choir, and Treble Clef Choir are all year long skinny classes. Students may choose up to two classes. Concert Band, Bass Clef Choir, and Treble Clef Choir meet at the same time.

### Concert Band

Concert Band is organized by auditions. Regularly scheduled lessons on an individual or small group basis is required. During 1st Term, everyone is part of the "Pride" Marching Band, which performs at home football games (varsity football team members are exempted from marching at home games), some civic parades, and several marching band competitions. Concert Band rehearsals begin in 2nd Term and continue throughout the remainder of the school year. Rehearsal emphasis is based on development of symphonic band sound through work on intonation, musical expression, listening, and sight-reading. Members of the band are exposed to all types and styles of band literature. The Concert Band performs 3-4 formal concerts per year, in which attendance is required. In addition, members of the group have the opportunity to audition for the All-State Music Festival, various honor bands, and State Solo and Ensemble Festival.

School horn rental/uniform cleaning and replacement fees to be established on an annual basis.
Mixed Chorus

Four Terms
Grades 9 or 10

Open to any freshman or sophomore. Class emphasis is on correct vocal development and part independence as well as music reading. Literature is taken from all styles and time periods. Individual lessons are a requirement for this class. Two concerts are required each semester as well as State Large Group Contest. Students have the opportunity to participate in the All-State Music Festival, State Solo-Ensemble Contest and various honor choirs.

Bass Clef Choir

Prerequisite: Currently enrolled in Mixed Chorus or Concert Choir

Four Terms
Grades 9, 10, 11 or 12

Class emphasis is on the vocal characteristics unique to the lower registry and developing the entire range. One concert is required each term as well as State Large Group Contest. Students must supply a banded collar tux shirt, black shoes, and black socks.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee if student is in Concert Choir and Bass Clef.

Treble Clef Choir

Prerequisite: Currently enrolled in Mixed Chorus or Concert Choir

Four Terms
Grades 9, 10, 11 or 12

Class emphasis is on the vocal characteristics unique to the higher registry and developing the entire range. One concert is required each semester as well as State Large Group Contest.

Concert Choir

Four Terms
Grades 11 or 12

Open to juniors and seniors. Class emphasis is on development of the choral sound through performance. Literature is taken from the state required list and all-state repertoire as well as other sources. It will include many styles from many time periods. Individual lessons are a requirement for this class. This class is geared toward students who have one or two years of a high school choir (although this is not a prerequisite). One concert is required each term as well as State Large Group Contest, and Graduation. Students have the opportunity to participate in the All-State Music Festival, State Solo-Ensemble Contest and various honor choirs. A banded collar tux shirt, black dress shoes, and black socks may be required dependent upon the student’s assignment in the choir.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee if student is in Concert Choir and Bass Clef.

Music Theory

One Term
Grades 10, 11 or 12

This course is open to sophomores, juniors and seniors who are interested in learning more about the mechanics of music, how it is put together and why. This course would be very helpful to those planning on music as a vocation, as well as those wanting a more in-depth study of music. Music Theory is intended for students who want to explore the theory of music at a deeper level.

Music Appreciation MUS:100

NICC Concurrent Credit - 3 college credits

One Term
Grades 11 or 12

This course is a survey of the development of music through study of representative compositions of many periods and styles. Vocabulary is presented to discuss the musical works. Upon completion of the course, the students will learn to listen to music with increased understanding, think and write clearly about music, and become more knowledgeable members of an audience.

Co-Curricular Activities:

A. Jazz Band

Auditions are required for entry into this select group. Students must be a member of Concert Band to qualify for membership. Improvisation and current jazz idioms, rock fusion, and popular music are used in rehearsals. The Jazz Band participates in many contests and concerts throughout the year. The organization of a second Jazz Band is possible if interest and instrumentation permit.
B. Musical Production Orchestra

This group is a select group made up of students selected by audition and interview. Students involved must plan to spend extra time in the evenings for rehearsals and performances.

C. Show Choir

Auditions are required for selection into this select group. Students must be enrolled in a curricular choir all four terms for consideration. This group focuses on the visual element as well as listening. Much of the music is choreographed. Literature is mostly taken from the Broadway, pop, or contemporary genre. Rehearsals are outside the school day. This group performs at many contests, concerts and community functions throughout the year.

PHYSICAL EDUCATION

Physical Education includes physical fitness activities that increase cardiovascular endurance, muscular strength and flexibility; sports and games, tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities.

9-10 Physical Education

Required

One Term

Grades 9 & 10

This course will include an introduction to body composition. Students will use a SMART goal plan to establish fitness goals. Students will be exposed to multiple lifelong activities. These activities will be designed to improve their understanding and technique in body weight exercise, improve basic core strength and stability, and development of leadership and teamwork qualities through game play.

11-12 Physical Education

Required

One Term

Grades 11 & 12

This course will include the development of an individualized program designed to improve body composition. The students will assess and adjust their individual needs through the use of time in the weight room and in PE activities. Students will participate in more advanced techniques in the weight room and will be exposed to a higher level of skills activity settings.

PRE-EMPLOYMENT STRATEGIES

*Pre-Employment Strategies SDV:153

NICC Concurrent Credit- 2 college credits

The course provides a basic introduction to skills necessary for an entry-level employment position. Networking with local employers will be a key component. A work performance rating and a National Career Readiness Certificate™ will be awarded based on results of WorkKeys® testing. These certifications will be recognized in interviewing and compensation practices of some local employers. Options for continuing education through NICC programs will be stressed. Students may also choose to enter directly into the workforce after successfully completing the course.

PROJECT LEAD THE WAY

PLTW's curriculum makes math and science relevant for students. By engaging in hands-on, real-world projects, students understand how the skills they are learning in the classroom can be applied in everyday life.

Introduction to Engineering Design (IED) EGT:400

NICC Concurrent Credit - 3 college credits

Two Terms

Grades 9, 10, 11 or 12

Prerequisites: Concepts of Algebra I or Algebra I or currently enrolled in Concepts of Algebra I or Algebra I

Recommendation: Students are also enrolled in a college prep math class sometime during the school year.

The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design
software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. This course teaches students to:

- Understand and apply the design process to solve various problems in a team setting
- Interpret their own sketches in using computer software to design models
- Understand cost analysis, quality of control, staffing needs, packing and product marketing
- Explore career opportunities in design engineering and understand what skills and education these jobs require

**Principles of Engineering (POE) EGT:410**
Two Terms
NICC Concurrent Credit - 3 college credits
Grades 9, 10, 11 or 12
Prerequisites: Introduction to Engineering Design
Recommendation: Students are also enrolled in a college prep math class sometime during the school year.

This course provides an overview of engineering and engineering technology. Students will develop problem-solving skills by tackling real-world engineering problems. Students will get practical hands-on experiences in Process Design, Communication and Documentation, Systems of Engineering, Statics, Testing of Materials, Dynamics, and Quality and Reliability of Products. This course teaches students to:

- Demonstrate an understanding of engineering concepts, theories and technological trends
- Analyze various engineering and technology career opportunities
- Demonstrate teamwork, leadership, safety practices and work ethic by engaging in individual and team activities
- Apply acquired knowledge to design and construct devices used to solve practical problems

**Computer Integrated Manufacturing (CIM) EGT:450**
Two Terms
NICC Concurrent Credit - 3 college credits
Grades 10, 11 or 12
Prerequisites: Introduction to Engineering Design
Recommendation: Students are also enrolled in a college prep math class sometime during the school year.

***Not available for 2019-2020. This class may be offered in subsequent years.***

This course teaches the fundamentals of computerized manufacturing technology. It builds on the solid modeling skills developed in the Introduction to Engineering Design course. Students use 3-D computer software to solve design problems. They assess their solutions through mass propriety analysis, modify their designs, and use prototyping equipment to produce 3-D models. Students will be learning:

- Use of 3-D software for mass property analysis
- Develop an understanding of the operating procedures and programming capabilities of machine tools
- Convert computer-generated geometry into a program to direct the operation of machine tools
- Program robots to handle materials in assembly-line operations

**Computer Science Principles CIS:450**
Two Terms
NICC Concurrent Credit: 3 college credits
Grades 10, 11 or 12
Recommendation: Students are also enrolled in a college prep math class sometime during the school year.

***Not available for 2019-2020. This class may be offered in subsequent years.***

Computer Science Principles is a computer science course for high school students. Students work in teams to develop computational thinking and problem solving skills. Structured activities progress to open-ended projects and problems that build project management, documentation, and communication skills. Students in the course use several programming languages to foster computational thinking and creativity and to build excitement about computing. Students also learn about the impact of computing across all career paths and consider societal issues raised by computing. There are four units in this course. The first unit takes up approximately 70% of the course’s scheduled time.
SCIENCE

The Iowa Core Curriculum requires that West Delaware students complete:
1 term earth science (available through Science Interactions)
1 term physical science (available through Science Interactions)
2 terms of biological science (Concepts of Biology or Biology)
2 terms of chemistry (Concepts of Chemistry or Chemistry I)

<table>
<thead>
<tr>
<th>High School Diploma and Two-Year College</th>
<th>Four-Year College</th>
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</thead>
<tbody>
<tr>
<td>Science Interactions</td>
<td>Science Interactions</td>
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<tr>
<td>Concepts of Biology</td>
<td>Biology</td>
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<tr>
<td>Concepts of Chemistry</td>
<td>Chemistry I</td>
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<tr>
<td>Recommended Electives (HS Diploma and Two-year College)</td>
<td>Recommended electives (Four-year College)</td>
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<tr>
<td>Astronomy</td>
<td>Astronomy</td>
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<tr>
<td>Biology</td>
<td>Chemistry II</td>
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<tr>
<td>Chemistry I</td>
<td>Chemistry III</td>
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<tr>
<td>Environmental Science</td>
<td>Anatomy and Physiology I</td>
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<tr>
<td></td>
<td>Anatomy and Physiology II</td>
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<td>Environmental Science</td>
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Six terms of science are required for graduation. Six terms of laboratory science are strongly recommended by most and required by many institutions for admission to college or a university (Science Interactions, Concepts of Chemistry, or Concepts of Biology generally do not meet these requirements for a 4-year institution).

A combination of advanced courses in Biology, Chemistry, and Physics are also taken by many college-bound students, especially those wanting to prepare for a science related career. The Astronomy and Environmental Science courses are electives available to students who have successfully completed Science Interactions (or an equivalent course load and meet appropriate prerequisite).

Science Interactions

Two Terms
Grade 9

Students will use scientific inquiry to explore physical science concepts that they will apply to real-world situations in the areas of forces, energy, light and sound, and earth science.

Environmental Science

One Term
Grades 9, 10, 11 or 12

Students will examine the biological basis of environmental science and human influence on biosphere dynamics. Emphasis on scientific principles, inter-relationships among resources, pollution and environmental degradation, soil and water conservation, and the impact that politics, economics, ethics, and world view have on the future direction for life on the planet.

Concepts of Biology

Two Terms
Grades 9, 10, 11 or 12

Students will examine and analyze the human body, human genetics, and related human health and environmental issues. Students will demonstrate an understanding of these concepts by developing integrated models, conducting research, and writing reports.

Biology

Two Terms
Grades 9, 10, 11 or 12

Through the processes of comparing, contrasting, evaluating, and predicting, students will demonstrate an understanding of the biological concepts involved in cellular structure and function, heredity, and taxonomy.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Terms</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td><strong>Concepts of Chemistry</strong></td>
<td>Two Terms</td>
<td>Science Interactions</td>
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<tr>
<td></td>
<td>Grades 10, 11, 12</td>
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<tr>
<td>Students will use scientific inquiry to explore chemical and biochemical concepts dealing with elements, atoms, bonds, solutions, reactions, photosynthesis, and cell respiration. They will demonstrate an understanding of these concepts by hypothesizing outcomes, conducting experiments, analyzing results, drawing conclusions, and relating these concepts to the real world.</td>
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**Chemistry I**

<table>
<thead>
<tr>
<th>Two Terms</th>
<th>Two Terms</th>
<th>Science Interactions</th>
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<tbody>
<tr>
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<td>Grades 10, 11, 12</td>
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<tr>
<td>Students will apply the scientific method and communicate their findings as they inquire into the properties of elements, compounds, macromolecules and their reactions. Students will compile a body of information that relates selected chemical applications to course concepts in order to complete their inquiry.</td>
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</table>

**Chemistry II**

<table>
<thead>
<tr>
<th>One Term</th>
<th>One Term</th>
<th>Chemistry I, Algebra II or Concepts of Algebra II</th>
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<tr>
<td></td>
<td>Grades 11, 12</td>
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<tr>
<td>Students will apply the scientific method and communicate their findings as they inquire into the properties of everyday fluids and the particles they contain. Students will estimate, calculate, and derive stoichiometric relationships among particles and demonstrate hypothetical interactions by explaining, illustrating, role-playing and constructing particle models.</td>
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**Chemistry III**

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<thead>
<tr>
<th>One Term</th>
<th>One Term</th>
<th>Chemistry II</th>
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<td>Grades 11, 12</td>
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<tr>
<td>Students will apply the scientific method and communicate their findings as they inquire into the properties and interactions of matter and energy. Students will derive relationships from and draw conclusions about reacting chemicals and relate their findings to the world around them.</td>
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**Astronomy**

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<tr>
<th>One Term</th>
<th>One Term</th>
<th>Science Interactions</th>
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<td>Grades 10, 11, 12</td>
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<tr>
<td>Investigate the history of space exploration, constellations, and use of the telescope. Study the elements of our solar system: planets and their moons, comets, asteroids, and the sun. Astronomical principles will be presented in a combination of student activities, at a low level of mathematical difficulty, and involving various laboratory inquiry experiences.</td>
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**Physics**

<table>
<thead>
<tr>
<th>Two Terms</th>
<th>Two Terms</th>
<th>Science Interactions and Algebra II</th>
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<td>Grades 10, 11, 12</td>
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<tr>
<td>Using inquiry, students will study reaction and particle physics, kinematics, vectors, forces, momentum, projectiles, and rotary motion. This is a class that is recommended for students who need a basic physics understanding for future study but do not wish to delve into trigonometry applications (e.g., nursing, radiology tech, music, dental tech, armed forces, or education-related majors).</td>
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**Anatomy and Physiology (A&P I)**

<table>
<thead>
<tr>
<th>One Term</th>
<th>One Term</th>
<th>Biology and Chemistry I</th>
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<td>Grades 11, 12</td>
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<tr>
<td>Students will examine and analyze the systems of the human body and demonstrate an understanding of the structure and function of the systems as interdependent and dependent systems through illustration, media projects, and reports.</td>
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**Anatomy and Physiology II (A&P II)**

<table>
<thead>
<tr>
<th>One Term</th>
<th>One Term</th>
<th>Anatomy and Physiology I</th>
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<tr>
<td></td>
<td>Grades 11, 12</td>
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<tr>
<td>Students will examine and analyze the systems of the human body and demonstrate an understanding of the structure and function of the systems which are interdependent and dependent systems through the use of illustrations, media projects, and reports. They will explain the interdependence of all body systems which are not examined in the first course.</td>
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</tbody>
</table>
SOCIAL STUDIES

Global Studies

Two Terms
Grades 9, 10, 11 or 12

A variety of regions will be examined through many different disciplines such as geography, history, economics, sociology, anthropology and political science. Social issues that relate to the region will also be discussed in the course. The objectives of this course are to give students a better understanding of the regions and how they interact with our own culture.

Introduction to Psychology

One Term
Grades 9, 10, 11 or 12

This course will examine the conscious and unconscious levels of the brain. Also, during this one-term class, topics like personality development, sensation and perceptions along with approaches to psychology will be studied.

Introduction to Sociology

One Term
Grades 9, 10, 11 or 12

Basic sociological principles and basic processes of group behavior will be studied. This includes the study of social interaction, family and group life, social institutions, status and role, culture, population, structure and change, and community structures (both urban and rural).

Modern American History (1980s to the present)

One Term
Grades 9, 10, 11 or 12

The political, social, and cultural history of America is studied in the content of the fall of communism to present day. Students will use primary and secondary sources and will learn to use social studies skills. Several writing samples and projects are required in this course.

Modern Social Problems

One Term
Grades 9, 10, 11 or 12

During the term the following topics may be examined: inequalities of race and ethnicity in the United States, inequalities of gender and age, adolescent issues, and issues within the American family. The objective of the course is to give the student a better understanding of these social problems, analyze the nature and causes, and suggest possible strategies and solutions.

Regions of the World

One Term
Grades 9, 10, 11 or 12

Focuses on human and physical characteristics of regions along with the historical content of those areas. The class will use multiple tools in order to process global issues and propose solutions in a local and global context.

U. S. History

Two Terms
Grades 9, 10, 11 or 12

United States History, WWI to the Civil Right Movement, is a course that is a continuation of 8th grade American History. This course will begin with the origins of WWI and end with the fall of communism. In this course we will study the following topics: WWI, the Jazz Age, the Great Depression and New Deals, WW II, the Cold War, the era of the 1960s and 70s, and the fall of communism. The study within each of the topics will focus on the changes within American society in the following areas: social, political, ideological, economic, technology, and pop culture. Students are required to complete work using primary and secondary sources and will learn how to use social studies skills. Several writing samples and projects are also required in this course.

American Government

Two Terms
Grade 12
(11th grade exceptions with just cause)

American Government is a two term course required for graduation. This course covers the role and characteristics of the state, the three branches of government and their functions, federalism, the Constitution and basic rights, and the role that Supreme Court decisions have in society. The course emphasizes the rights and responsibilities of citizens, immigration, elections and
political parties, and civil and criminal law. Emphasis will be on critical thinking and reasoning skills, as well as the analysis of current issues and their relevance to local, state and national levels.

TALENTED AND GIFTED (TAG)

Tag Seminar

Required: Identified TAG students only
One Term
Grades 9, 10, 11 or 12

Identified TAG students can sign up to take a nine-week class with the TAG teacher. During the nine-week class, the students will brainstorm and research an area of interest. Students will be expected to complete a contract and write a proposal as to how they are going to fulfill the project requirements. Students will keep a learning log as to what is accomplished each day, and the log will be a part of the final evaluation. A rubric will be developed, between students and the TAG teacher, for grading the final project.

WORLD LANGUAGE

Studying a world language opens up a new world, giving students the opportunity to learn about other cultures, places, and people. The skill of speaking additional languages may enhance job opportunities and make travel more meaningful and enjoyable. Students in world language classes may also gain an appreciation of their own language.

World language study is strongly advised for those who wish to attend college and for those who are interested in business occupations, but world language classes are open to any students who have a desire to learn to communicate in another language. All students should be aware that mastery of any language takes a good deal of time and effort; therefore, an extended sequence of study is recommended.

College-bound students are advised to consider their plans carefully and to check catalogs of colleges to be sure they are fulfilling the language requirement. Many colleges require world language and often they are willing to count high school classes toward the college requirement. Two cautions: 1) "two levels of world language" means two levels of the same language and 2) taking two levels of high school language does not necessarily exempt a student from college language requirements. Some schools give proficiency tests or require more than two levels. Check the catalog carefully.

Students must pass the first term of a class with a grade of 60% or higher in order to continue to the next level.

College-bound students should plan to be in a language class their senior year if possible.

FRENCH:

French I

Two Terms
Grades 9, 10, 11 or 12

French I is an introductory-level French class. In French I, students will learn basic French vocabulary and grammar and will be introduced to the culture of the French-speaking world. All four communications skills--listening, speaking, reading, and writing--are practiced.

French II

Prerequisite: French I
Two Terms
Grades 9, 10, 11 or 12

In French II, students continue study of basic French vocabulary, grammar, and culture of the French-speaking world. The primary goal is to develop the ability to communicate in French.

French III

Prerequisite: French II
Two Terms
Grades 10, 11 or 12

French III is an advanced course dealing with continued study of structure, vocabulary, and cultures. Speaking will be emphasized, and class activities are designed to allow for ample practice in using the language to communicate. This class is conducted entirely in French. Depending on enrollment, French III may be taught in combination with French IV-V.
French IV
Prerequisite: French III
Two Terms
Grades 10, 11 or 12

In French IV, students will continue to expand their communicative abilities. The French IV class is conducted entirely in French.

French V
Prerequisite: French IV
Two Terms
Grades 11 or 12

French V is an advanced class. Class goals and activities can be modified depending on the needs of the students, but in order to be successful, students need to be self-motivated and responsible. French V is currently offered as a combined class with French IV.

SPANISH:

Spanish I
Two Terms
Grades 9, 10, 11 or 12

Spanish I covers basic vocabulary, grammar, and sentence structure necessary to using the language. Cultural information on Hispanic countries is included.

Spanish II
Prerequisite: Spanish I
Two Terms
Grades 9, 10, 11 or 12

In Spanish II, students continue study of basic Spanish vocabulary, grammar, and culture of the Spanish-speaking world. The primary goal is to develop the ability to communicate in Spanish.

Spanish III
Prerequisite: Spanish II
Two Terms
Grades 10, 11 or 12

Spanish III is an advanced course, dealing with continued study of grammar, sentence structure, vocabulary, and cultures. The emphasis in Spanish III is on speaking. The class is conducted entirely in Spanish and no English is permitted. Depending on enrollment, Spanish III may be taught in combination with Spanish IV-V.

Spanish IV
Prerequisite: Spanish III
Two Terms
Grades 10, 11 or 12

In Spanish IV, students will continue expanding their communicative abilities. In Spanish IV the class is conducted entirely in Spanish.

Spanish V
Prerequisite: Spanish IV
Two Terms
Grades 11 or 12

Spanish V is an advanced class. Class goals and activities can be modified depending on the needs of the students, but in order to be successful, students need to be self-motivated and responsible. Spanish V is currently offered as a combined class with Spanish IV.

OTHER PROGRAMS:

Tutorial Learning (Classroom enrollment by assignment only)

This classroom will provide structured academic assistance and support. The focus will be on improved attendance, development of appropriate goals and work habits to achieve academic success. Criteria for acceptance into this course will be based on the student's past attendance record and previous grades. Grading for this course will be Pass-Fail.

Students may not enroll or take more than four credits of the following courses, and are limited to taking these courses only 2 terms per academic year.

* Service Experience
* Open Campus
**Service Experience**

Requires Teacher/Sponsor approval

Only two terms per year

One credit per term

Grade 12 or administrator approval

Service experience is a process whereby students learn and develop through active participation in organized service activities that meet the school and/or community needs. Service experience provides students opportunities to use their acquired skills and knowledge in real life situations in their school and/or communities; this enhances teaching by extending student learning into the community and helps foster a sense of caring for others. Students may not be sponsored by a relative for service experience.

Students will complete a self-reflection of their Service Experience pertaining to skills gained, knowledge acquired, and future plans. The self-reflection will be evaluated by the sponsor. Approval of teacher/sponsor required. Grading for this course will be Pass-Fail.

**Open Campus**

Only two terms per year

Grade 12

Open Campus is a privilege for seniors who have earned a 1.667 (C-) or better in each course in the term previous. Should a student receive a "D" or "F", he/she would not be granted Open Campus. If course grades improve to 1.667 (C- or above in each course) in the next term, students will be eligible for Open Campus the following term. All seniors who wish to take Open Campus are required to have a signed parent permission slip on file in the High School Counseling Office. Students may not take Open Campus more than one period per term.

**Placement in College Credit Course (PICC)**

High school students may take college courses for both high school and college credit under the provisions of Senior Year Plus programming. The Placement in College Credit courses (PICC) program allows high school students to enroll part-time in college credit courses at designated community colleges prior to high school graduation, earning both high school and college credit for the courses taken. Students in grades nine through twelve who demonstrate proficiency in all areas of the Iowa Assessment, may apply for enrollment in PICC courses through a community college after consultation with the building principal and at the expense of the school district. For the purposes of PICC, courses requested may not be comparable to courses offered by West Delaware School District. Comparable is not synonymous with identical, but means that the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district or accredited nonpublic school. The school district shall make this determination when a student submits an application for a PICC course. District staff including building principal, school counselors, and teachers have a significant role in advising and helping students enroll in appropriate coursework.

**Post-Secondary Enrollment Options (PSEO)**

High school students may take college courses for both high school and college credit under the provisions of the Post-Secondary Enrollment Options Act/Senior Year Plus programming. Ninth and tenth grade students who are identified as Talented and Gifted (TAG) and eleventh and twelfth grade students who have demonstrated proficiency in all areas of the Iowa Assessment/ISASP, may apply for enrollment in courses at post-secondary institutions, with approval of building principal and at the expense of the school district. Students who fail the course or fail to receive credit in the course paid for by the school district must reimburse the school district for all costs directly related to the course. Eligible students might enroll in courses at any of the Regent schools or universities, or accredited private colleges. For the purposes of PSEO, courses requested may not be comparable to that of those offered by West Delaware School District. Comparable is not synonymous with identical, but means that the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district or accredited nonpublic school. The school district shall make this determination when a student submits an application for a PSEO course. Contact the High School TAG coordinator or the High School Counseling Office for further information.

**Fall Semester Deadline:** May 15th of previous school year

**Spring Semester Deadline:** November 1st of current school year
English Skills (Classroom enrollment by assignment only) Grades 9, 10, 11 or 12

English Skills is designed to improve students reading comprehension, fluency and writing skills. Students will participate in activities to develop skills in vocabulary development, communication, and the process of writing. Each student will participate in activities based on the Iowa Core Essential Elements as well as their individual goals. Core concepts will be practiced and applied across content areas such as science and social studies and applied to real world situations. Students are assigned based on district criteria.

Mathematics Skills (Classroom enrollment by assignment only) Grades 9, 10, 11 or 12

Explore Mathematics is designed to improve students’ mathematics and financial literacy skills. Students will participate in activities to develop skills in operations with numbers and fractions, basic geometric terms, the start of writing and solving equations, collecting and organizing data, basic probability and financial literacy. Each student will participate in activities based on the Iowa Core Essential Elements as well as their individual goals. Core concepts will be practiced and applied across content areas and applied to real world situations. Students are assigned based on district criteria.

Science Skills (Classroom enrollment by assignment only) Grades 9, 10, 11 or 12

Science Skills is designed to provide students with the skills and opportunities they need to read, write, think, and apply science in their everyday lives. The course provides the factual foundation necessary to understanding the principles of science discussed in the course. Units of study will focus on physical science, biology, and chemistry. Each student will participate in activities based on the Iowa Core Essential Elements. Connections to students’ lives will be woven throughout the course. Students are assigned based on district criteria.

Social Studies Skills (Classroom enrollment by assignment only) Grades 9, 10, 11 or 12

Social Studies Skills is designed to help students become informed citizens of a culturally diverse nation and an interdependent world. In this course, students experience and investigate key social studies concepts. Units of study will focus on civics, economics, American History, world history, and geography. Students will study the societies, ideas, and issues regarding the developing world and will focus on the diversity of human interaction. Connections to students’ lives will be woven throughout the course. Students are assigned based on district criteria.

Transition Skills (Classroom enrollment by assignment only) Grades 9, 10, 11 or 12

Transition Skills is designed to help students prepare to transition to life after high school. Students will develop skills align with the 21st Century Iowa Core around living (daily living concepts), learning (generalizing and transferring of academic knowledge and skills to real world applications), and working (vocational and employment). Units of study will include communication skills, decision making skills, daily living skills, safety and careers exploration, setting & achieving goals, organization and time management. Students are assigned based on district criteria.

NICC Career Learning Link Job Shadow Age Requirement: 16 years

A job shadow is an educational program where high school students can learn about a particular occupation or profession to see if it might be suitable for them and match their personal goals by “shadowing” someone in their work environment. In job shadowing, a business will partner with West Delaware to provide an experience for a student that is reflective of what it is like to perform a certain type of work. The student would accompany an experienced worker as they perform the targeted job for a few hours or a work day and have the opportunity to ask the worker questions about their job. This can prove valuable to a student because the student may use the experience to determine if this career is of interest to them or not. This is for educational purposes only. No credit will be given. This experience is offered to those participating in the NICC Career Learning Link program only.

Iowa Page

A junior or senior who applies and is selected to serve as a Page or Legislative Clerk in the Iowa Legislature will receive up to 2 credits for the school semester he/she is working in the legislature.

The student will submit a written weekly report of his/her legislative activities to the American Government teacher at West Delaware. The teacher will be responsible for setting the requirements for what is expected on the paper and for grading the
For this the student will receive one elective credit for each term successfully completed (maximum of two credits) on a pass/fail basis.

It is the student’s responsibility to see that all reports are submitted on time.

A student who is working as a Page or Legislative Clerk may elect to not take any other high school courses during the term he/she is on duty as a Page. Working as a Page does not replace the American Government class that is required of all seniors.

**SENIOR YEAR PLUS**

**(West Delaware High School Concurrent Credit Criteria)**

The intent of the senior year plus statute is to ensure all students in Iowa have increased access to courses that have the potential to generate college credits while in high school. The statute requires all students enrolling in college credit courses, with the exception of Career and Technical Education (CTE) courses, be proficient in reading, math and science. At West Delaware High School, Concurrent Credit classes include:

- Contracted courses at Northeast Iowa Community College
- Post-Secondary Enrollment Options Act courses (PSEO)
- College Credit Iowa Communication Network courses (ICN)

Senior Year Plus Programming

The following factors shall be considered in the Board’s determination of whether a student will receive credit toward the District graduation requirements through Senior Year Plus programming:

- the course is taken from a public or accredited private postsecondary educational institution;
- to be eligible to enroll in a course pursuant to this policy, a student shall demonstrate proficiency as defined in the High School Program of Studies in reading, mathematics, and science for an arts and science course, meet enrollment requirements established by the postsecondary institution, as well as be required to meet course prerequisites and/or achieve a satisfactory score on the College approved placement instrument;
- the course provided to a high school student for postsecondary credit supplements, and does not supplant, a course provided by the school district in which the student is enrolled. For purposes of this policy, to comply with the “supplement, not supplant” requirement, the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district;
- the course is in the discipline areas of mathematics, science, social sciences, humanities, vocational-technical education, or a course offered in the community college career options program;
- the course is a credit-bearing course that leads to a degree;
- the course is not religious or sectarian; and
- the course meets any other requirements set out by the Board.

Freshmen and sophomores in the TAG program and juniors and seniors who have implemented the postsecondary enrollment options (PSEO) of Senior Year Plus Programming will earn one high school credit for every three (3) semester hours of postsecondary credit in a subject area. Postsecondary credit not granted as semester hours will be prorated according to the postsecondary institution’s guidelines. Institutions are prohibited from enrolling students full-time in college credit courses at any one postsecondary institution through Senior Year Plus programs.

Students enrolled in concurrent enrollment under Senior Year Plus Programming through a community college will earn credit as approved by a District and Community College agreement.

For PSEO course, the school district is required to pay the cost of tuition, textbooks, materials and fees up to $250 per course for eligible students who take a postsecondary course during the school year. The purchase of special equipment required by the course is the obligation of the student and parents.

Students who take courses during the summer months when school is not in session shall be responsible for the costs of attendance for the courses.

If a student begins a PSEO course but does not complete the course or does not pass the course, it still becomes part of the student’s academic record. The cost of the course then becomes the responsibility of the student and his/her parents.
For concurrent enrollment courses, the district is responsible for costs as agreed to in the agreement with the community college. Textbooks will be provided in the same manner as provided for other high school courses.

The parent or guardian of an eligible pupil who has enrolled in and is attending an eligible postsecondary institution shall furnish transportation to and from the eligible postsecondary institution for the pupil.

**APPROVED CRITERIA ENSURING READING, MATH & SCIENCE PROFICIENCY:**

Students must meet one of the following. Individual courses may have additional criteria.

1. The student is proficient on the reading, math, and science portions of the Iowa Assessment/ISASP.
2. The student is proficient on the reading, math, and science portions of the ACT test. Proficiency is a score of 18 or higher.
3. The student is proficient on the Accuplacer Test. Proficiency is a score above the developmental level as determined by NICC. (NICC test requirement is a score of 70 on the reading test, and 44 on the elementary algebra test or 80 on the arithmetic test or 15 on the ALEKS math test). The student passing the Accuplacer Test would still need to prove proficiency in science on the Iowa Assessment/ISASP, ACT tests or specified course grades.
4. The instructor from the most recent course in Science, Reading or Mathematics will use the following chart to determine if the student shows evidence of proficiency.

Note: Proficiency can be met with any combination of the pre-approved criteria but must demonstrate proficiency in the area of reading and math using their most recent test score and in science using the most recent test score or grade in their last science course.

Specific concurrent credit courses may have different requirements. Please refer to course descriptions for more information.

<table>
<thead>
<tr>
<th>Science Proficiency</th>
<th>Evidence of Proficiency</th>
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<tbody>
<tr>
<td>Interpreting Information:</td>
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<tr>
<td>Makes inferences or predictions based on observed data</td>
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<tr>
<td>Infers unstated relationships</td>
<td></td>
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<tr>
<td>Extends conclusions to related phenomena</td>
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<tr>
<td>Analyzing Scientific Investigations:</td>
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<tr>
<td>Defines the problem of an experiment</td>
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<tr>
<td>Discerns the rationale for a procedure</td>
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<tr>
<td>Identifies limitations of a procedure</td>
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<tr>
<td>Selects best procedure</td>
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<tr>
<td>Analyzing and Evaluating Information:</td>
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<tr>
<td>Distinguishes among hypotheses, assumptions, data &amp; conclusions</td>
<td></td>
</tr>
<tr>
<td>Judges the relevance and adequacy of information for reaching a given conclusion</td>
<td></td>
</tr>
<tr>
<td>Selects the best evidence for answering a question</td>
<td></td>
</tr>
<tr>
<td>Judges the reliability of sources</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reading Proficiency</th>
<th>Evidence of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factual Understanding:</td>
<td></td>
</tr>
<tr>
<td>Understands stated information</td>
<td></td>
</tr>
<tr>
<td>Determines the literal meaning of words or phrases</td>
<td></td>
</tr>
<tr>
<td>Inference and Interpretation:</td>
<td></td>
</tr>
<tr>
<td>Draws conclusions or deduces meanings not explicitly stated in the text</td>
<td></td>
</tr>
<tr>
<td>Infers relationships</td>
<td></td>
</tr>
<tr>
<td>Infers the traits, feelings, and motives of the characters or individuals</td>
<td></td>
</tr>
<tr>
<td>Makes predictions</td>
<td></td>
</tr>
<tr>
<td>Applies information</td>
<td></td>
</tr>
<tr>
<td>Interprets non-literal language</td>
<td></td>
</tr>
<tr>
<td>Analysis and Generalization:</td>
<td></td>
</tr>
<tr>
<td>Determines the main idea, topic, or theme of a passage or portion of a passage</td>
<td></td>
</tr>
<tr>
<td>Identifies major points</td>
<td></td>
</tr>
<tr>
<td>Makes generalizations and interprets non-literal language</td>
<td></td>
</tr>
<tr>
<td>Identifies the author’s or speaker’s viewpoint or purpose</td>
<td></td>
</tr>
<tr>
<td>Distinguishes among facts, opinions, assumptions,</td>
<td></td>
</tr>
<tr>
<td>Observations, Conclusions</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Recognizes aspects of a passage’s style, structure, mood or tone</td>
<td></td>
</tr>
<tr>
<td>Recognizes literary or argumentative techniques</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics Proficiency</th>
<th>Evidence of Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding Mathematical Concepts and Procedures:</td>
<td></td>
</tr>
<tr>
<td>Selects appropriate procedures</td>
<td></td>
</tr>
<tr>
<td>Identifies examples and counterexamples of concepts</td>
<td></td>
</tr>
<tr>
<td>Data Interpretation:</td>
<td></td>
</tr>
<tr>
<td>Makes inferences or predictions based on data or information</td>
<td></td>
</tr>
<tr>
<td>Interprets data from a variety of sources</td>
<td></td>
</tr>
<tr>
<td>Problem Solving:</td>
<td></td>
</tr>
<tr>
<td>Reasons quantitatively</td>
<td></td>
</tr>
<tr>
<td>Evaluates reasonableness</td>
<td></td>
</tr>
</tbody>
</table>
CAREER PATHWAYS

In partnership with Northeast Iowa Community College (NICC) a number of career pathways have been created based upon courses offered at West Delaware High School. A career pathway is intended to be an educational road map outlining a sequence of courses that prepares students for post-secondary programs that will lead to certificate and/or degree programs based upon student career interest. Multiple options for students include: early college credit beginning in high school, industry certification requirements, certificate or associate degrees, employment, and in some cases preparation for transfer to a college/university.

For more detailed information regarding specific credits for programs at NICC please contact the High School Counseling Office for a Career Pathways booklet.

Automotive Career Pathway – West Delaware High School

Freshman/Sophomore
Courses in the Industrial Technology Department are recommended for this pathway.

Junior/Senior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT:102</td>
<td>Introduction to Auto Technology</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AUT:123</td>
<td>Applied Auto Basics I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>AUT:124</td>
<td>Applied Auto Basics II</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Additional Recommended Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT:128</td>
<td>* Precalculus</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>MAT:156</td>
<td>* Statistics</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>MAT:210</td>
<td>* Calculus</td>
<td>4</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>LIT:101</td>
<td>* Intro to Literature</td>
<td>3</td>
<td>ENG: 105</td>
</tr>
<tr>
<td>ART:101</td>
<td>* Art Appreciation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG:105</td>
<td>* Composition I</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>MUS:100</td>
<td>* Music Appreciation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

Credits earned in these courses can be applied to the following programs at NICC:

Automotive Mechanics Diploma (Peosta)
Automotive Technology AAS (Calmar)

Career Options:
- Automotive Mechanic/Service Technician
- Automotive Service and Parts Clerk
- Farm Equipment Mechanic/Service Technician
- Industrial Technology Teacher
- Insurance Appraiser, Auto Damage
- Sales Representative

Agriculture Career Pathway – West Delaware High School

Freshman/Sophomore
Courses in the Agriculture Education Department are recommended for this pathway.
### Junior/Senior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGS:114</td>
<td>Survey of Animal Industry</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AGS:101</td>
<td>Working with Animals</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>AGA:114</td>
<td>Principles of Agronomy</td>
<td>3</td>
<td></td>
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</tbody>
</table>

**Additional Recommended Courses**

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<td>*Composition I</td>
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<td>MAT:156</td>
<td>*Statistics</td>
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</tr>
<tr>
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<td>*Calculus</td>
<td>4</td>
<td>qualifying placement score</td>
</tr>
<tr>
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<td>*Art Appreciation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LIT:101</td>
<td>*Intro to Literature</td>
<td>3</td>
<td>ENG:105</td>
</tr>
<tr>
<td>MUS:100</td>
<td>*Music Appreciation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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#### Credits earned in these courses can be applied to the following programs at NICC:

- Agriculture Business AAS
- Agriculture Production AAS
- Beef Science Technology AAS
- Dairy Science AAS

#### Career Options:
- Agriculture Educator, Dairy Herd Supervisor, Feed and Supply Store Manager, Feed Sales Representative, GPS Technician, Livestock Producer, Quality Control Specialist

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### Business Career Pathway

#### Freshman/Sophomore

Courses in the Business/Technology Department are recommended for this pathway.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC115</td>
<td>Introduction to Accounting</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>SDV153</td>
<td>Pre-employment Strategies</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Recommended Courses**

<table>
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<tr>
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<tr>
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<tr>
<td>MUS:100</td>
<td>*Music Appreciation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

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#### Credits earned in these courses can be applied to the following programs at NICC:

- Accounting Clerk Diploma
- Accounting Specialist AAS

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Career Options:
Account Executive, Accounts Receivable Clerk, Administrative Assistant, Computer Network Support Specialist, Customer Service Representative, Human Resources Assistant, Retail Manager, Sales Representative, Web Developer

Manufacturing Career Pathway

Freshman/Sophomore (recommended)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>EGT:400</td>
<td>PLTW: Introduction to Engineering Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EGT:410</td>
<td>PLTW: Principles of Engineering</td>
<td>3</td>
<td>EGT:400</td>
</tr>
</tbody>
</table>

Junior/Senior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL:427</td>
<td>Basic Arc Welding (SMAW)</td>
<td>3</td>
<td>WEL228 &amp; WEL110</td>
</tr>
<tr>
<td>WEL:433</td>
<td>Basic Gas Metal Arc Welding (GMAW)</td>
<td>3.5</td>
<td>WEL228 &amp; WEL110</td>
</tr>
<tr>
<td>WEL:110 &amp; WEL:228</td>
<td>(Welding Blue Print Reading &amp; Safety)</td>
<td>2, 1</td>
<td></td>
</tr>
<tr>
<td>WEL:434</td>
<td>Flame and Plasma Cutting</td>
<td>1.5</td>
<td>WEL228</td>
</tr>
<tr>
<td>SDV:153</td>
<td>Pre-Employment Strategies</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Additional Recommended Courses

<table>
<thead>
<tr>
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<tr>
<td>MAT:156</td>
<td>* Statistics</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>MAT:210</td>
<td>*Calculus</td>
<td>4</td>
<td>qualifying placement score</td>
</tr>
<tr>
<td>ENG:105</td>
<td>* Composition I</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
</tbody>
</table>

* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

Credits earned in these courses can be applied to the following programs at NICC:

- CNC Machinist Technician Diploma
- Welding Diploma
- Mechanical Engineering Technology AAS

Career Options:
CNC Machinist, Gas Meter Mechanic and Installer, Heating and Air Conditioning Mechanic and Installer, Industrial Maintenance Technician, Manufacturing Technician, Quality Technician Welder, & Wind Turbine Repair Technician

Engineering Technology Career Pathway

Freshman/Sophomore

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT:400</td>
<td>PLTW Introduction to Engineering Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EGT:410</td>
<td>PLTW Principles of Engineering</td>
<td>3</td>
<td>EGT:400 recommended</td>
</tr>
</tbody>
</table>
### Junior/Senior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT:400</td>
<td>PLTW Introduction to Engineering Design</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EGT:410</td>
<td>PLTW Principles of Engineering</td>
<td>3</td>
<td>EGT:400 recommended</td>
</tr>
<tr>
<td>MAT:156</td>
<td>*Statistics</td>
<td>3</td>
<td>qualifying placement score</td>
</tr>
</tbody>
</table>

**Additional Recommended Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART:101</td>
<td>* Art Appreciation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LIT:101</td>
<td>* Intro to Literature</td>
<td>3</td>
<td>ENG:105</td>
</tr>
<tr>
<td>MUS:100</td>
<td>* Music Appreciation</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

**Credits earned in these courses can be applied to the following programs at NICC:**

**Mechanical Engineering Technology**

**Career Options:**

- Civil Engineering Technician
- Industrial Engineering Technician
- Industrial Maintenance Technician
- Manufacturing Technician
- Mechanical Engineering Technician
- Quality Technician

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### Welding Career Pathway Certificate

Recipients of this Certificate can enter the workforce ready for employment

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>NICC Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL:110</td>
<td>Welding Blueprint Reading</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>WEL:228</td>
<td>Introduction to Welding Safety and Health of Welders</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WEL:433</td>
<td>Basic Gas Metal Arc Welding (GMAW)</td>
<td>3.5</td>
<td>WEL110 &amp; 228</td>
</tr>
<tr>
<td>WEL: 434</td>
<td>Flame / Plasma Cutting</td>
<td>1.5</td>
<td>WEL228</td>
</tr>
<tr>
<td>WEL: 427</td>
<td>Basic Arc Welding (SMAW)</td>
<td>3</td>
<td>WEL110 &amp; 228</td>
</tr>
</tbody>
</table>

**Credits earned in these courses can be applied to the following programs at NICC:**

**Welding Diploma**

**Career Options:**

- Manufacturing
- Fabrication
- Construction
- Structural Iron and Steel Worker
- Maintenance and Repair Worker
- Pipe Fitter and Steamfitter
Northeast Iowa Community College
Calmar/Peosta

West Delaware Associate of Arts (AA)
Educational Plan
2018-2019

Name: ___________________________  Student ID # ___________________________

DEGREE REQUIREMENTS

It is the student's responsibility to understand and complete all degree requirements. A minimum cumulative GPA of 2.00 and a passing grade in all required courses is needed for graduation.

It is recommended that you work closely with your advisor as you select coursework that could fulfill requirements toward the major you wish to pursue at the four-year institution. Courses on this education plan may not be offered every semester or every academic year. Please discuss course availability with an academic advisor.

Reading requirement for all programs: The ability to read and comprehend information is a core value of Northeast Iowa Community College. A base reading assessment score or evidence of appropriate course completion will satisfy this requirement.

COMMUNICATION (9 credits)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Trans. Inst.</th>
<th>Credit</th>
<th>Term/Year</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG:105</td>
<td>Composition I</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HUMANITIES (12 credits)


<table>
<thead>
<tr>
<th>Course #</th>
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<th>Term/Year</th>
<th>Grade</th>
</tr>
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<tbody>
<tr>
<td>ART:101</td>
<td>Art Appreciation</td>
<td></td>
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<td></td>
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<tr>
<td>LIT:101</td>
<td>Intro to Literature</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MATH/SCIENCE (10 credits)

A minimum of one transfer-level MAT and one transfer-level BIO, CHM, ENV, PHS, PHY required. One Science course must include a lab component.

<table>
<thead>
<tr>
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<th>Course Title</th>
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<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>MAT:128</td>
<td>Pre-calculus</td>
<td></td>
<td>3</td>
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<td></td>
<td>4</td>
<td></td>
<td></td>
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</tbody>
</table>
SOCIAL SCIENCE (9 credits)
Transfer-level courses from two different disciplines ECN, GEO, POL, PSY, SOC required.

<table>
<thead>
<tr>
<th>Course #</th>
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<th>Credit</th>
<th>Term/Year</th>
<th>Grade</th>
</tr>
</thead>
</table>

REMAINING REQUIREMENTS (20 credits)
The remaining semester hours will be accepted from transfer-level arts and sciences electives with the understanding that up to 16 semester hours of career-technical credit could be applied which includes SDV:179 The College Experience and a computer literacy course. The computer literacy requirement may be met with BCA:112, BCA:212, or GIS:111.

<table>
<thead>
<tr>
<th>Course #</th>
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<th>Grade</th>
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<tbody>
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<td>AGA:114</td>
<td>Principles of Agronomy</td>
<td></td>
<td>3</td>
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</tr>
<tr>
<td>AGS:114</td>
<td>Survey of Animal Industry</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
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<td>AGS101</td>
<td>Working with Animals</td>
<td></td>
<td>1</td>
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<td>AUT:102</td>
<td>Intro to Auto Technology</td>
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<td>3</td>
<td></td>
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<td>PNN:200</td>
<td>Dosage Calculations</td>
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<td>2</td>
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<tr>
<td>HIT:140</td>
<td>Medical Terminology</td>
<td></td>
<td>4</td>
<td></td>
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<tr>
<td>HSC:110</td>
<td>Intro to Health Occupations</td>
<td></td>
<td>3</td>
<td></td>
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<tr>
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</table>
DEGREE REQUIREMENTS

It is the student's responsibility to understand and complete all degree requirements. A minimum cumulative GPA of 2.00 and a passing grade in all required courses is needed for graduation.

It is recommended that you work closely with your advisor as you select coursework that could fulfill requirements toward the major you wish to pursue at the four-year institution. Courses on this education plan may not be offered every semester or every academic year. Please discuss course availability with an academic advisor.

Reading requirement for all programs: The ability to read and comprehend information is a core value of Northeast Iowa Community College. A base reading assessment score or evidence of appropriate course completion will satisfy this requirement.

<table>
<thead>
<tr>
<th>COMMUNICATION (9 credits)</th>
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<tbody>
<tr>
<td><strong>Course #</strong></td>
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<tr>
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<tr>
<td>ENG:105</td>
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**HUMANITIES/SOCIAL SCIENCE (12 credits)**


<table>
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<tr>
<th>Course #</th>
<th><strong>Course Title</strong></th>
<th><strong>Trans. Inst.</strong></th>
<th><strong>Credit</strong></th>
<th><strong>Term/Year</strong></th>
<th><strong>Grade</strong></th>
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<tbody>
<tr>
<td>ART:101</td>
<td>Art Appreciation</td>
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<tr>
<td>MUS:100</td>
<td>Music Appreciation</td>
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<td>LIT:101</td>
<td>Intro to Literature</td>
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</table>

**MATH/SCIENCE (20 credits)**

Transfer-level MAT and transfer-level: BIO, CHM, ENV, PHS, PHY required. One Science course must include a lab component.

<table>
<thead>
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<tbody>
<tr>
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<td>MAT:156</td>
<td>Statistics</td>
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<td>MAT:210</td>
<td>Calculus</td>
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</table>
REMAINING REQUIREMENTS (19 credits)
The remaining semester hours will be accepted from transfer-level arts and sciences electives with the understanding that up to 16 semester hours of career-technical credit could be applied which includes SDV:179 The College Experience and a computer literacy course. The computer literacy requirement may be met with BCA:112, or BCA:212, or GIS:111.

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<td>Principles of Agronomy</td>
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<td>AGS:114</td>
<td>Survey of Animal Industry</td>
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<td>AGS101</td>
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<td>Intro to Auto Technology</td>
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