Muncie Community Schools

2019-2020

Curriculum Handbook
(Revised: May 28, 2019)
INTRODUCTION

This Curriculum Handbook is published to assist students and parents in planning student programs that will prepare them for post-secondary study or the workplace. The format provides detailed information on grade levels, content, pre-course recommendations, and descriptions for each course.

Prior to entering high school, students will take a career interest inventory and, in consultation with the school counselor, will develop a Graduation Pathway Plan. While this plan may be altered as the student progresses through school, the course of study selected by the student should align with a career pathway and be realistic in terms of academic and technical competencies.

The four-digit number listed corresponds to the code number and course title on the high school course selection sheet.

Each year during the course scheduling process, students meet with school counselors to establish selections and programs for the subsequent year. Parents/guardians are encouraged to contact the guidance office for input into their child’s course selections to ensure participation in the most valuable and challenging course work offered by the Muncie Community Schools that will effectively serve each student’s needs.

Students and parents should utilize the information in this handbook in order to fully understand graduation/credit requirements before developing a graduation pathway plan.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Page #</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>3</td>
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<td>4-5</td>
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<td>92-93</td>
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<td>94-98</td>
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<td>99-101</td>
</tr>
</tbody>
</table>
GRADUATION REQUIREMENTS
Class of 2020, 2021, and 2022

Each student is required to meet the following in order to graduate:

1. Achieve passing scores on the Indiana Graduation Qualifying Examination (GQE) which is the ISTEP+ Grade 10 Math and ISTEP+ Grade 10 English/Language Arts assessments;

AND

2. Complete all required and elective credits and curricular requirements for one of the following diploma types:
   a. Core 40 Diploma
   b. Academic Honors Diploma
   c. Technical Honors Diploma
   d. General Diploma (Requires Opt-Out Process)

Students are required to earn a minimum of forty (40) credits to earn a Muncie Central High School diploma.

INDIANA GRADUATION QUALIFYING EXAMINATION (GQE)
- Students are required to achieve passing scores on the ISTEP+ Grade 10 Math and ISTEP+ Grade 10 English/Language Arts assessments (or qualify for a waiver) in order to meet the Indiana Graduation Qualifying Examination requirements.
- Students take the ISTEP10+ assessments in the spring of their sophomore year. If a student does not pass the ISTEP+ Grade 10 English/Language Arts and/or Math assessment, the student will be provided two additional opportunities to retest each year after the school year in which the student first took the examination.

Students in the 2019 – 2022 graduating classes may satisfy the GQE requirement for graduation in one of the following ways:

1) Achieve passing scores on the (GQE) ISTEP+ GR 10 English and Math Tests

2) Qualify for GQE Waiver if unable to pass the GQE/ISTEP 10 by senior year (See GQE Waiver Requirements: Evidence-Based or Work-Readiness)

3) Complete requirements for the Graduation Pathway Diploma -- If a student is unable to pass the GQE by the spring of his or her junior year, the student may request to be transferred to the Graduation Pathway Diploma plan.

4) Qualify for the Graduation Pathway Waiver (See Graduation Pathway Waiver)
GRADUATION REQUIREMENTS - CLASS OF 2023 AND BEYOND
GRADUATION PATHWAY DIPLOMA

Each student in the Class of 2023 and beyond is required to meet the following in order to graduate:

1. **High School Diploma – Complete all the required and elective credit and curricular requirements for one of the following diploma options:**
   a. Core 40 Credit Outline
   b. Academic Honors Credit Outline
   c. Technical Honors Credit Outline
   d. General Credit Outline (Requires Opt-Out Process)

   Students are required to earn a minimum of forty (40) credits to earn a Muncie Central High School diploma.

2. **Employability Skills:** The student through a Project-based (PBS), Service-based (SBL), or Work-based (WBL) learning experience must demonstrate the Indiana Department of Workforce Development’s Employability Skills Benchmarks: Career Mindsets, Self-Management Skills, Learning Strategies, Social Skills, and Workplace Skills. The employability skills experience must be validated by a student *work product* and *school approval*.

   Student must **complete at least one** of the following experiences:

<table>
<thead>
<tr>
<th>EMPLOYABILITY EXPERIENCE OR ACTIVITY</th>
<th>WORK PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 WBL Student Employment (75-100 Hours)</td>
<td>Work Letter from Employer</td>
</tr>
<tr>
<td>2 WBL Work-Based Learning Class (Paid Position)</td>
<td>Workplace Skills Evaluation</td>
</tr>
<tr>
<td>3 WBL Career Exploration Internship Class (Non-paid)</td>
<td>Workplace Skills Evaluation</td>
</tr>
<tr>
<td>4 WBL MACC CTE Programs with Internship Experience</td>
<td>Internship Workplace Skills Evaluation</td>
</tr>
<tr>
<td>5 WBL Teen Works – Summer Work Experience</td>
<td>Supervisor Evaluation</td>
</tr>
<tr>
<td>6 WBL JROTC (Minimum 2 semesters)</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>7 WBL Cadet Teaching</td>
<td>Supervisor Evaluation</td>
</tr>
<tr>
<td>8 WBL JAG – Jobs for America’s Graduates (2 semesters)</td>
<td>Resume/Cover Letter</td>
</tr>
<tr>
<td>9 SBL Sports Participation</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>10 SBL Key Club</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>11 SBL Peer Tutoring</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>12 SBL Student Council or Class Officer</td>
<td>Reflection of Experience</td>
</tr>
<tr>
<td>13 SBL National Honor Society</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>14 SBL Recycling Club</td>
<td>Rubric &amp; Recommendation</td>
</tr>
<tr>
<td>15 PBL PLTW Biomedical (2nd Year: MI and BI)</td>
<td>Student project report or PPT</td>
</tr>
<tr>
<td>16 PBL PLTW Civil Engineering &amp; Architecture</td>
<td>Student project report or PPT</td>
</tr>
</tbody>
</table>

   The above list is not all inclusive as there may be additional activities or programs identified as options that students can use for demonstrating employability skills.
3. **Postsecondary-Ready Competencies:** The student is required to demonstrate his or her readiness to transition from high school to being ready to enter college, career training, workplace, or entrance into the military by completing one of the options listed below.

Student must *complete one* of the following:

### Postsecondary-Ready Competency Options

<table>
<thead>
<tr>
<th></th>
<th>Honors Diploma</th>
<th>Complete all of the requirements for Academic Honors or Technical Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>SAT</td>
<td>Reading/Writing=480, Math=530 (Must meet individual scores in each subject)</td>
</tr>
<tr>
<td>3</td>
<td>ACT</td>
<td>English=18, Reading=22, Math=22, Science=23 (Student must earn the score in 2 of the 4 subjects: Reading or English and Math or Science)</td>
</tr>
<tr>
<td>4</td>
<td>ASVAB</td>
<td>Earn a minimum score of 31 (AFQT) on the Armed Services Vocational Aptitude Battery</td>
</tr>
<tr>
<td>5</td>
<td>Industry Certification</td>
<td>Achieve a passing score on any industry certification test on the approved Department of Workforce Development list (updated annually by DWD)</td>
</tr>
<tr>
<td>6</td>
<td>Career &amp; Technical Education Pathway Concentrator</td>
<td>Earn a C average in the specified two (2) capstone courses in a Career and Technical Education pathway program</td>
</tr>
<tr>
<td>7</td>
<td>Advanced Placement Courses</td>
<td>Earn a C average in at least three (3) Advanced Placement courses</td>
</tr>
<tr>
<td>8</td>
<td>Dual Credit</td>
<td>Earn a C average in at least three (3) dual credit courses. One of the three courses must be in a core content area (CTL) or all three courses must be part of a defined Career-Technical Education Pathway</td>
</tr>
</tbody>
</table>

### Meeting Graduation Pathway Requirements

- Students in the 2023 graduating class and beyond may qualify for a waiver from meeting the Postsecondary Readiness Competency provided the student completes all credit requirements, Employability Skills requirements, and meets the conditions for the Graduation Pathway Waiver.
- (See Graduation Pathway Postsecondary Waiver Requirements)
**Career and Technical Education Pathway Options**

A **Career & Technical Education (CTE) Pathway** is a series of classes focused on a specific career field. A **CTE Concentrator** is a student who completes the two (2) capstone or final classes in a career and technical education sequence of classes focused on a specific career area. A CTE Pathway **may** include opportunities for the student to earn dual credits, industry certification, and participation in an internship. CTE Pathways allow students the opportunity to learn more about a specific career field. Students with a career focus prior to graduation are better prepared to select the right postsecondary option: Apprenticeship, community college, university, certification or technical training, military service, or other options.

<table>
<thead>
<tr>
<th>Career Cluster</th>
<th>Career Pathway</th>
<th>Required Prerequisites</th>
<th>Concentrator Courses</th>
<th>Cert</th>
<th>Loc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture &amp; Construction</td>
<td>Construction</td>
<td>None</td>
<td>Construction Trades I&lt;br&gt;Construction Trades II&lt;br&gt;Construction Trades: Electrical I&lt;br&gt;Construction Trades: Electrical II</td>
<td>NCCER</td>
<td>MACC</td>
</tr>
<tr>
<td></td>
<td>Electrical</td>
<td>None</td>
<td>Digital Applications and Responsibility&lt;br&gt;Interactive Media&lt;br&gt;Graphic Design and Layout</td>
<td>NCCER</td>
<td>MACC</td>
</tr>
<tr>
<td>Arts, AV Technology and Communications</td>
<td>Interactive Media</td>
<td>Digital Applications and Responsibility&lt;br&gt;Interactive Media&lt;br&gt;Graphic Design and Layout</td>
<td>MACC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business &amp; Marketing</td>
<td>Marketing Management</td>
<td>None</td>
<td>Principles of Marketing&lt;br&gt;Strategic Marketing</td>
<td>RIFAC S&amp;S</td>
<td></td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>Early Childhood Education&lt;br&gt;-Child Dev&lt;br&gt;-Adv Child Dev</td>
<td>Early Childhood Education I&lt;br&gt;Early Childhood Education II</td>
<td>Pre-PAC</td>
<td>MACC</td>
<td></td>
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<tr>
<td></td>
<td>Education Careers</td>
<td>-Child Dev&lt;br&gt;-Adv Child Dev</td>
<td>Education Professions I&lt;br&gt;Education Professions II</td>
<td>Pre-PAC</td>
<td>MCHS</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Health Science – Nursing</td>
<td>None</td>
<td>Health Science I&lt;br&gt;Health Science II: Nursing</td>
<td>CNA License</td>
<td>MACC</td>
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<tr>
<td></td>
<td>Health Science – Dental Careers</td>
<td>None</td>
<td>Dental Careers I&lt;br&gt;Dental Careers II</td>
<td>Pre-PAC</td>
<td>MCHS</td>
</tr>
<tr>
<td></td>
<td>Health Science – Biomedical PLTW</td>
<td>- Biology I&lt;br&gt;- Biomedical Science</td>
<td>Human Body Systems&lt;br&gt;Medical Interventions&lt;br&gt;*Biomedical Innovations (Extra)</td>
<td>MACC</td>
<td></td>
</tr>
<tr>
<td>Hospitality &amp; Human Services</td>
<td>Cosmetology</td>
<td>None</td>
<td>Cosmetology I&lt;br&gt;Cosmetology II</td>
<td>State License</td>
<td>MACC</td>
</tr>
<tr>
<td></td>
<td>Human &amp; Social Services</td>
<td>None</td>
<td>Human &amp; Social Services I&lt;br&gt;Human &amp; Social Services II</td>
<td>Pre-PAC</td>
<td>MCHS</td>
</tr>
<tr>
<td></td>
<td>Nutrition Careers</td>
<td>None</td>
<td>Nutrition Science Careers I&lt;br&gt;Nutrition Science Careers II</td>
<td>MCHS</td>
<td></td>
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<tr>
<td>IT – Computer Science (STEM)</td>
<td>Computer Science Cybersecurity</td>
<td>Intro to Computer Science</td>
<td>Computer Science I&lt;br&gt;Computer Science: Cybersecurity</td>
<td>MCHS</td>
<td></td>
</tr>
<tr>
<td>Manufacturing &amp; Logistics</td>
<td>Robotics</td>
<td>None</td>
<td>Industrial Automation &amp; Robotics I&lt;br&gt;Industrial Automation &amp; Robotics II</td>
<td>MSSC</td>
<td>MACC</td>
</tr>
<tr>
<td></td>
<td>Welding</td>
<td>None</td>
<td>Welding Technology I&lt;br&gt;Welding Technology II</td>
<td>AWS IVY</td>
<td></td>
</tr>
<tr>
<td>Public Safety</td>
<td>Criminal Justice</td>
<td>None</td>
<td>2020-2021: Criminal Justice I&lt;br&gt;2020-2021: Criminal Justice II</td>
<td>MACC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fire and Rescue</td>
<td>None</td>
<td>2020-2021: Fire and Rescue I&lt;br&gt;2020-2021: Fire and Rescue II</td>
<td>FF1 MACC</td>
<td></td>
</tr>
<tr>
<td>Science, Technology, Engineering &amp; Math</td>
<td>Engineering</td>
<td>Intro Engineering &amp; Design</td>
<td>Principles of Engineering&lt;br&gt;Civil Engineering &amp; Design&lt;br&gt;*Engineering Design &amp; Dev (Extra)</td>
<td>MCHS</td>
<td></td>
</tr>
<tr>
<td>Transportation &amp; Logistics</td>
<td>Automotive</td>
<td>None</td>
<td>Automotive Services Technology I&lt;br&gt;Automotive Services Technology II</td>
<td>ASE MACC</td>
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# Core 40 Credit Outline – 40 Credits

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>English/Language Arts</strong></td>
<td>8</td>
</tr>
<tr>
<td>English 9-12 must fulfill this requirement. Other English courses may fulfill this requirement.</td>
<td></td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>6</td>
</tr>
<tr>
<td>6 Credits (in grades 9-12)</td>
<td></td>
</tr>
<tr>
<td><strong>Quantitative Reasoning</strong></td>
<td></td>
</tr>
<tr>
<td>For the Core 40 diploma, students must take a mathematics course or alternate quantitative reasoning course each year they are enrolled in high school.</td>
<td></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>6</td>
</tr>
<tr>
<td>6 Credits</td>
<td></td>
</tr>
<tr>
<td>2 credits: Biology I</td>
<td></td>
</tr>
<tr>
<td>2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics</td>
<td></td>
</tr>
<tr>
<td>2 credits: any Core 40 science course</td>
<td></td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td>6</td>
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<tr>
<td>6 Credits</td>
<td></td>
</tr>
<tr>
<td>2 credits: U.S. History</td>
<td></td>
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<tr>
<td>1 credit: U.S. Government</td>
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<tr>
<td>1 credit: Economics</td>
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<tr>
<td>2 credits: World History/Civilization or Geography/History of the World</td>
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<tr>
<td><strong>Physical Education</strong></td>
<td>2</td>
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<tr>
<td>Health &amp; Wellness</td>
<td>1</td>
</tr>
<tr>
<td><strong>Directed Electives</strong></td>
<td>5</td>
</tr>
<tr>
<td>World Languages: Latin, Spanish, Japanese</td>
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<tr>
<td>Fine Arts: Music, Theatre, Visual Arts, Mass Media</td>
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</tr>
<tr>
<td>Career and Technical Education Pathway Courses</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>40</td>
</tr>
<tr>
<td>40 Credits – Minimum Required for an MCS Diploma</td>
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</tbody>
</table>
Core 40 with Academic Honors Credit Outline – 47 Credits

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English/Language Arts</strong></td>
<td>8</td>
<td>English 9–12 fulfill this requirement Other English courses may fulfill this requirement</td>
</tr>
</tbody>
</table>
If a student has completed a middle school curriculum that is equivalent to high school Algebra I and is placed in Geometry, that student must earn only six (6) high school mathematics credits. |
| **Quantitative Reasoning**|          | For the Academic Honors Diploma students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school. |
| **Science**               | 6       | 2 credits: Biology I  
2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics  
2 credits: any Core 40 science course |
| **Social Studies**        | 6       | 2 credits: U.S. History  
1 credit: U.S. Government  
1 credit: Economics  
2 credits: World History/Civilization or Geography/History of the World |
| **World Languages**       | 6–8     | Latin, Spanish, Japanese  
Six (6) credits in a single world language or four (4) credits in each of two (2) different world languages |
| **Fine Arts**             | 2       | Music, Theatre, Visual Arts                                                                                                                   |
| **Physical Education**    | 2       |                                                                                                                                             |
| **Health & Wellness**     | 1       |                                                                                                                                             |
| **Electives**             | 7-9     | Core 40 courses/credits which will enhance or support the academic career sequence of the student's graduation plan |
| **Grade Requirements**    |          | - Earn a grade of a “C” or better in courses that will count toward the diploma  
- Have a grade point average of a “B” or better |
| **Other Requirements**    |          | Complete one of the following:  
A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams  
B. Earn 6 verifiable transcripted college credits in dual credit courses from priority course list  
C. Earn a minimum of 3 verifiable transcripted college credits from the priority course list and 2 credits in AP courses and corresponding AP exams  
D. Earn a combined score of 1250 or higher w/ a minimum score of 560 on math and 590 on the evidence based reading and writing  
E. Earn an ACT composite score of 26 or higher and complete written section |
| **TOTAL**                 | 47      | Credits required for Core 40 with Academic Honors                                                                                             |
### Core 40 with Technical Honors Credit Outline – 47 Credits

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| **English/Language Arts** | **8 Credits** | English 9–12 fulfill this requirement  
Other English courses may fulfill this requirement. |
| **Mathematics**        | **6 Credits (in grades 9-12)** | Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry, Calculus,  
Probability & Statistics, Finite Math |
| **Quantitative Reasoning** |          | For the Core 40 with Technical Honors diploma, students must take a  
mathematics course or alternate quantitative reasoning course each year they  
are enrolled in high school. |
| **Science**            | **6 Credits** | 2 credits: Biology I  
2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics  
2 credits: any Core 40 science course |
| **Social Studies**     | **6 Credits** | 2 credits: U.S. History  
1 credit: U.S. Government  
1 credit: Economics  
2 credits: World History/Civilization or Geography/History of the World |
| **Career-Technical Pathways** | **6 or more Credits** | Earn 6 credits in the college and career preparation courses in a state-approved  
College & Career Pathway and one of the following:  
1. Pathway designated industry-based certification or credential, or  
2. Pathway dual credits from the approved dual credit list resulting in six (6)  
transcripted college credits |
| **Physical Education** | **2 Credits** |                                                                 |
| **Health & Wellness**  | **1 Credit** |                                                                 |
| **Electives**          | **6 or more Credits** | Core 40 courses/credits which will enhance or support the academic career  
sequence of the student's graduation plan. |
| **Grade Requirements** |          | - Earn a grade of a “C” or better in courses that will count toward the diploma  
- Have a grade point average of a “B” or better |
| **Other Requirements** |          | Complete one of the following:  
A. Any one of the options (A-E) of the Core 40 with Academic Honors  
B. Earn the following scores or higher on WorkKeys: Reading for Information  
Level 6; Applied Mathematics – Level 6; Locating Information – Level 5  
C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90,  
and Math 75  
D. Earn the following minimum score(s) on Compass; Algebra 66, Writing 70,  
Reading 80 |
| **TOTAL**              |         | 47 Credits required for Core 40 with Technical Honors |
General Diploma Credit Outline (Minimum 40 Credits)

The Indiana General Assembly made completion of the Core 40 Diploma requirements a mandate for all students beginning with those entering high school in fall 2007. The legislation also made Core 40 a minimum college admission requirement for the state’s public four-year universities beginning in fall 2011.

To graduate with less than the Core 40 Diploma, the student must follow the formal Opt-Out process.

<table>
<thead>
<tr>
<th>English/Language Arts</th>
<th>8 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English 9–12 fulfill this requirement</td>
</tr>
<tr>
<td></td>
<td>Other English courses may fulfill this requirement.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>4 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 credits: Algebra I or Integrated</td>
</tr>
<tr>
<td></td>
<td>2 credits: any math course</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantitative Reasoning</th>
<th>For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Science</th>
<th>4 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 credits: Biology I</td>
</tr>
<tr>
<td></td>
<td>2 credits: any science course (at least one must be from a Physical or Earth and Space Science course)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Studies</th>
<th>4 Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2 credits: U.S. History</td>
</tr>
<tr>
<td></td>
<td>1 credit: U.S. Government</td>
</tr>
<tr>
<td></td>
<td>1 credit: any social studies course</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical Education</th>
<th>2 Credits</th>
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<table>
<thead>
<tr>
<th>Health &amp; Wellness</th>
<th>1 Credit</th>
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<thead>
<tr>
<th>College and Career Pathway Courses</th>
<th>6 Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Flex Credit</th>
<th>5 Credits</th>
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<tbody>
<tr>
<td></td>
<td>To earn 5 Flex Credits a student must complete one of the following:</td>
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<tr>
<td></td>
<td>• Additional courses to extend the CTE Pathway</td>
</tr>
<tr>
<td></td>
<td>• Courses involving workplace learning, such as Work-Based Learning</td>
</tr>
<tr>
<td></td>
<td>• High School/college dual credit courses</td>
</tr>
<tr>
<td></td>
<td>• Additional courses in English, Math, Science, Social Studies, or other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>6 Credits</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>40 Credits – Minimum Required for an MCS Diploma</th>
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</thead>
</table>
Opt-Out Process from Indiana’s Core 40 Graduation Requirements

The Indiana General Assembly made completion of Core 40 a graduation requirement for all students. The legislation includes an opt-out provision for parents who determine that their student could benefit more from the General Diploma. To graduate with less than Core 40, the following formal opt-out process must be completed:

(Indiana Code 20-32-4-7, 8, 9, 10)

1. The student, the student’s parent or guardian, and the student’s counselor (or another staff member who assists students in course selection) meet to discuss the student’s progress.
2. The student’s career and course plan is reviewed.
3. The student’s parent or guardian determines if the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
4. If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirements for a General Diploma, and the career-academic sequence that the student will pursue is determined.

If the parent does not attend the opt-out meeting with the student and the student's counselor after receiving two (2) written requests to attend, the student and the student’s counselor shall meet. The student's counselor shall make a recommendation to the student as to whether the student will achieve greater educational benefits by continuing in the Core 40 curriculum or completing the general curriculum, and the student shall determine which curriculum the student will complete.

Students opting out of Core 40 after their 11th grade year must complete all requirements for the General Diploma with the career-academic sequence requirement waived. This waiver allows students who switch to the General Diploma curriculum at the end of their 11th grade year to graduate with their class. This waiver allows out-of-state students who transfer to Indiana following the 11th grade year to graduate with their class.

Core 40 Opt-Out Conditions

The following conditions may trigger a discussion about opting-out of the Core 40 Diploma requirements:

- A parent may request that a student be exempted from the Core 40 curriculum and be required to complete the General Diploma to graduate, or
- The student does not pass at least three (3) courses required under the Core 40 curriculum, or
- The students receives a score on the ISTEP (GQE) that is in the twenty-fifth percentile or lower when the student takes the assessment for the first time.
GQE WAIVER REQUIREMENTS – Classes 2020 - 2022

Students in the 2020 – 2022 graduating classes may meet GQE Waiver requirements by one of these two methods:

1. “Evidence-based” Waiver - A student who does not achieve a passing score on the graduation examination may be eligible to graduate if the student has done all of the following during high school:
   (1) Takes the graduation examination in each subject area in which the student did not achieve a passing score at least one (1) time every school year after the school year in which the student first takes the graduation examination,
   (2) Completes remediation opportunities provided to the student by the student's school,
   (3) Maintains a school attendance rate of at least ninety-five percent (95%) with excused absences not counting against the student's attendance,
   (4) Maintains at least a "C" average or the equivalent in the courses comprising the credits specifically required for graduation by rule of the state board,
   (5) Otherwise satisfies all state and local graduation requirements, and
   (6) Obtains a written recommendation from a teacher of the student in each subject area in which the student has not achieved a passing score on the graduation examination. The written recommendation must be concurred by the principal of the student's school and be supported by documentation that the student has attained the academic standard in the subject area based on (A) tests other than the graduation examination or (B) classroom work.

2. “Work-readiness” Waiver - A student who does not achieve a passing score on the graduation examination may be eligible to graduate if the student has done all of the following during high school:
   (1) Takes the graduation examination in each subject area in which the student did not achieve a passing score at least one (1) time every school year after the school year in which the student first takes the graduation examination,
   (2) Completes remediation opportunities provided to the student by the student's school,
   (3) Maintains a school attendance rate of at least ninety-five percent (95%) with excused absences not counting against the student's attendance,
   (4) Maintains at least a "C" average or the equivalent in the courses comprising the credits specifically required for graduation by rule of the IDOE,
   (5) Otherwise satisfies all state and local graduation requirements, and
   (6) Completes the course and credit requirements for a General Diploma, including the career academic sequence, a workforce readiness assessment, and workforce industry certification.
GRADUATION PATHWAY POSTSECONDARY WAIVER
REQUIREMENTS – Class of 2023 and beyond

Students in the 2023 graduating class and beyond may qualify for a waiver from meeting the Postsecondary Readiness Competency under the following conditions:

A) The student was unsuccessful in completing a postsecondary readiness competency requirement by the conclusion of the student’s senior year, including a student who was in the process of completing a competency at one school that was not offered by the school to which the student transferred; and the student attempted to achieve at least three separate postsecondary readiness competencies; or

B) if a student transfers to a school during the senior year from a non-accredited nonpublic school or an out-of-state school and the student attempted to achieve at least one postsecondary readiness competency requirement; and was unsuccessful in completing the attempted postsecondary readiness competency.

To receive a Postsecondary Readiness Waiver, the student must:

1. Maintain at least a C average, or its equivalent, throughout the student’s high school career in courses comprising credits required for the student to graduate;
2. Maintain a school attendance rate of at least 95% with excused absences not counting against the student’s attendance;
3. Satisfy all other state and local graduation requirements beyond the postsecondary readiness competency requirements; and
4. Demonstrate postsecondary planning, including:
   a. College acceptance;
   b. Acceptance in an occupational training program;
   c. Workforce entry; or
   d. Military enlistment;
      that is approved by the principal of the student’s school.
**ACCUPLACER**

The test selected by the Indiana Department of Education is ACCUPLACER, which is a computer-adaptive testing system developed by The College Board. These exams provide both placement scores for placement into college courses and diagnostic scores that can be used to “drill down” and identify students’ strengths and specific areas of need. The results and information from the ACCUPLACER exams provide schools with a detailed assessment of students’ skills, which will assist in course selection and remediation plans for students.

For course placement, the ACCUPLACER is given to Early College Students at the end of their 8th grade year. In order to qualify for college credits in many Dual Credit courses, students are given the corresponding ACCUPLACER tests. The ACCUPLACER is given to juniors and seniors who need an assessment benchmark for graduation.

**ADVANCED PLACEMENT COURSES**

Advanced Placement Courses are those for which the College Board has developed a course description and examination and which may be used to meet high school graduation requirements. Advanced Placement courses within the Muncie Community Schools are as follows:

- Advanced Placement Biology
- Advanced Placement Calculus, AB
- Advanced Placement Calculus, BC
- Advanced Placement Chemistry
- Advanced Placement Computer Sciences A
- Advanced Placement Computer Science Principles
- Advanced Placement English Language and Composition
- Advanced Placement English Literature and Composition
- Advanced Placement Environmental Science
- Advanced Placement Government and Politics: United States
- Advanced Placement Micro Economics 1
- Advanced Placement Macro Economics 2
- Advanced Placement Physics I, Algebra Based
- Advanced Placement Physics II, Algebra Based
- Advanced Placement Psychology
- Advanced Placement Spanish Language
- Advanced Placement Statistics
- Advanced Placement Studio Art, 2D
- Advanced Placement Studio Art, 3D
- Advanced Placement U.S. History
- Advanced Placement World History

**Note:** Students taking an Advanced Placement (AP) Course will be required to take the corresponding AP Exam at the end of the course.
GIFTED AND TALENTED PROGRAM - HONORS CLASSES
The Muncie Community Schools, through its Gifted and Talented Program, offers Honors courses to students in grades six (6) through tenth (10). Students are selected for participation in the program based on their academic achievement and standardized test scores, course grades, and teacher recommendations. Parents may also refer their children for program consideration.

CREDIT RECOVERY
The Credit Recovery program provides students the opportunity to recover credits needed to graduate on time. The One-Hour Credit Recovery Programs (CRP) are conducted at Muncie Central High School. Students admitted to the One-Hour CRP use APEX software during a standard class period to complete the course requirements for a specific credit/course. The MACC CRP is operated at the Muncie Area Career Center, and priority enrollment is given to seniors and some juniors. The MACC CRP operates on a block schedule, and students using APEX software attempt to recover multiple credits. The criteria for admission to the CRP programs are as follows:

Student must be on a diploma track and referred to the program by a school administrator or school counselor and
A. has attempted and failed to complete the traditional academic course at least once prior to consideration, or
B. as a third or fourth-year student in jeopardy of not graduating with her/his class due to a lack of credits, or
C. a student who has been withdrawn from a course for other than a serious behavioral problem, or
D. a student who has been withdrawn from a course for a serious behavior problem will not be permitted to enroll in the course in the CRP before a subsequent semester, or
E. at the discretion of the principal or superintendent.

CLASS AUDIT
Students may be allowed to audit a class using the following criteria:
• The student must have the approval of the principal after the student has consulted with the counselor and teacher.
• The student would be on a stand-by basis as class size permits.
• The student must do assignments required of students taking the class for credit.
• The student must adhere to the school’s attendance policy.
• The student cannot audit and then later take the class for credit.
A student should see his or her counselor for an application to audit a class, prior to the start of the semester.

DUAL CREDIT
Dual credit is when high school students have the opportunity to earn both high school and college credits simultaneously. Dual credit courses are taught by high school faculty, adjunct college faculty or college faculty either at the high school, at the college or university, or sometimes through online courses or distance education.
**Note:** A PSAT, SAT, ACT, and/or an Accuplacer score will be used to determine whether a student qualifies to earn their dual credit. If a student does not qualify for the dual credit, he/she may remain in the course and earn HS credit.

**POST-SECONDARY CREDIT**
A local school board shall recognize courses completed in a post-secondary institution in meeting high school graduation requirements provided that:
- the institution is an accredited public or private college or university located in Indiana that grants a baccalaureate or associate degree
- prior approval is obtained as outlined by the local school board policy.

A student should request the post-secondary credit form from his high school counselor.

**EARLY GRADUATION**
- The student will meet all graduation credit requirements by the graduation date requested and will have satisfied GQE requirements for both the ISTEP 10 English and math exams or fulfill Graduation Pathway requirements before applying for early graduation.
- Request for one-year early graduation must be submitted prior to the start of their junior year. Students must have earned 26 credits prior to the submission of their request.
- Request for one semester early graduation must be submitted prior to the start of their senior year. Students must have earned 33 credits prior to the submission of their request.
- The high school principal is responsible for approving early graduation requests. If the student’s request is denied, it may be appealed to the Superintendent, and a decision of the Superintendent to deny a request may be appealed to the Board of School Trustees.
- A student granted a request for early graduation may participate in the graduation ceremonies with his/her designated class.

**ENROLLMENT ON PASS/FAIL BASIS**
Students may elect to take one class each year for one semester on a pass/fail basis. Only one class may be taken on a pass/fail basis from a subject matter area. Enrollment for pass/fail credit should be requested on the proper form at the time of regular enrollment in a class but must be done prior to the first day of class. *Courses taken on a pass/fail basis cannot count toward the Core 40, Core 40 with Academic Honors Diploma, or Core 40 with Technical Honors.*

**GRADE PROGRESS REPORTS**
Grade cards are distributed at the end of the nine-weeks’ grading period. Mid-term progress reports will be provided online for each student on four dates specified by the corporation.
GRADING SCALE
The Muncie Community Schools’ 9-12 grade scale is:

- 90 - 100% = A
- 80 - 89% = B
- 70 - 79% = C
- 60 - 69% = D
- 59% & below = F

WEIGHTED GRADES
Honors courses and AP courses shall be figured in the following manner:

- A weighting factor of .2 is multiplied by the total number of weighted courses taken and then divided by the number of semesters completed.
- The quotient is then added to the GPA established by the actual earned grades in all course work.

HONOR ROLL ELIGIBILITY CRITERIA
There will be three Honor Roll categories for secondary schools:

- 4.0 Grade Point Average Honor Roll
- 3.5 Grade Point Average Honor Roll
- 3.0 Grade Point Average Honor Roll

Additional criteria:

- Honor Roll will be determined from nine-weeks’ grades.
- To be eligible, students must be enrolled and earning credit in at least five (5) classes. A course taken on pass/fail option will not count as one of these five (5) classes.
- Students will be ineligible for Honor Roll if they have earned a grade of “F” in any course.

GRADE REVIEW GUIDELINES
It is the position of the Board of School Trustees of the Muncie Community Schools that grades awarded for student achievement and performance are determined by the student’s teacher. This is totally appropriate because only the teacher has adequate information to make these decisions. It is extremely important that students, parents/guardians, and teachers understand this position completely. The following guidelines will be used in working with a request for reviewing a student’s grade. The request may be initiated at Step 1 or 2 by the student and/or parent/guardian.

1. A conference with student and teacher will occur.
2. A conference with parent/guardian and teacher will occur. Other appropriate school personnel may be involved if requested.
3. Formal request for a grade review must be made on the appropriate form within five (5) days following the official date grades are issued.
4. A conference involving a building administrator, parent/guardian, student, teacher, and other appropriate school personnel will be scheduled.
5. Closure of a grade review request will occur within the ten (10) school days following the official date grades are issued.
6. At the end of the school year the formal request must be made on the appropriate form within one (1) week. Closure of the grade review request will occur within two (2) weeks following the official date grades are issued.
7. After closure of the grade review request, a student’s grade may be adjusted.
EXTRA-CURRICULAR ELIGIBILITY
To be eligible for participation in any school-sponsored extra-curricular activities, a student must be passing in at least five (5) subjects each grading period and at the end of a semester. At the end of a semester, the semester grades take precedence over the grades earned the last grading period. A student who is passing in five (5) subjects but maintaining less than a 2.0 GPA at the end of a grading period or semester will be required to participate in a before- and after-school study program at least twice a week to maintain eligibility. Failure to participate in the study program will make the student ineligible for participation in extracurricular activities for the grading period. Eligibility will be determined by the last grades officially posted. For example, a student’s grades at the end of the second semester will determine eligibility at the beginning of the following year. A student’s summer school grades can be used to re-establish lost at the end of the second semester provided the student has passed a total of five (5) combined classes for the second semester and summer school.

A student will be deemed eligible at the end of first semester in the new level/school of his/her educational career; a student’s elementary GPA will not influence his/her eligibility at the middle school level; a student’s middle school GPA will not influence his/her eligibility at the high school level.

COLLEGE ATHLETIC ELIGIBILITY
Students who plan to enroll in college and participate in Division I or Division II athletics must be certified by the National Collegiate Athletic Association (NCAA) Eligibility Clearinghouse. Grade point, SAT, and ACT requirements can be located on the NCAA Eligibility Center web site at www.eligibilitycenter.org. Students need to start this process during their sophomore year.

<table>
<thead>
<tr>
<th>Division I 16 Core Courses</th>
<th>Division I Qualifier Requirements</th>
<th>Division II 16 Core Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 years of English</td>
<td>16 core courses</td>
<td>3 years of English</td>
</tr>
<tr>
<td>3 years of Mathematics</td>
<td>Ten core courses completed before the start of the seventh semester. Seven of the ten must be in English, Math, or Natural physical science. “locked-in” for core-course GPA calculation</td>
<td>2 years of Mathematics (Algebra I or higher)</td>
</tr>
<tr>
<td>(Algebra I or higher)</td>
<td></td>
<td>2 years of Natural/Physical Science (1 year of lab if offered by high school)</td>
</tr>
<tr>
<td>2 years of Natural/Physical Science (1 year of lab if offered by high school)</td>
<td>2 years of Social Science</td>
<td>2 years of Social Science</td>
</tr>
<tr>
<td>1 year of additional English Mathematics, or Natural/Physical Science</td>
<td>Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on sliding scale.</td>
<td>3 years of additional English, Mathematics, or Natural/Physical Science</td>
</tr>
<tr>
<td>2 years of Social Science</td>
<td>Graduate from high school</td>
<td>4 years of additional Academic courses (any area above, foreign language or comparative religion/philosophy)</td>
</tr>
</tbody>
</table>

| 4 years of additional Academic courses (any area above, foreign language or comparative religion/philosophy) |

RETAKING A COURSE
Students are permitted to retake a course for a higher grade that will be recorded in the student’s record. If a student elects to retake a course, both grades will be included in the calculations of the grade point average; however, only one (1) credit may be counted toward the graduation requirements.
RECEIVING CREDITS BY DEMONSTRATING PROFICIENCY  (Indiana Code 20-36-5-1)
A student shall receive credits toward graduation or an academic honors diploma by demonstrating the student’s proficiency in a course or subject area required for graduation or the academic honors diploma, whether or not the student has completed course work in the subject area, by any one (1) or more of the following methods:
1) Receiving a score that demonstrates proficiency on a standardized assessment of academic or subject area competence that is accepted by accredited postsecondary educational institutions
2) Receiving a high proficiency level score on an end-of-course assessment for a course without taking the course.
3) Successfully completing a similar course at an eligible institution under the postsecondary enrollment program under IC 21-43-4.
4) Receiving a score of three (3), four (4), or five (5) on an advanced placement examination for a course or subject area.
5) Other methods approved by the State Board of Education.

SCHEDULE CHANGES
School counselors focus their efforts on class scheduling and individual and group counseling. Scheduling changes will be made for those students who have schedules with an administrative error. No other changes will be made unless there are extenuating circumstances.

SCHOOL FORMS
Students should speak to their counselor if they wish to obtain one of the following forms:
• Application to Audit a Course
• Application for Cadet Teaching
• Request for Enrollment on a Pass/Fail Basis
• Application for Post-Secondary Program
• Application to Retake a Course
• Request for Early High School Graduation

SPECIAL EDUCATION
Muncie Community Schools has a goal of providing full educational opportunity to all eligible students with disabilities in compliance with Title 511, Article 7, Rules 17-31. A continuum of special education placements, in the least restrictive environment, is available. These services are available for eligible students at least 3 years of age, but less than 22 years of age, as deemed appropriate by the case conference committee. Students participating in special education have available to them the same variety of educational programs and services available to all students.

Each year a case conference committee reviews and, if necessary, revises the student’s individualized education program (IEP). The appropriate educational modifications/accommodations and special education services are determined by the case conference committee. Also determined at that time is the extent to which each student will participate in general education courses/programs, including non-instructional, non-academic, and extra-curricular activities for which the student is eligible. It is important for each student, as appropriate, and his/her parents or
guardians to attend the conference and participate in program planning and course selection.

If any student or parent has questions about his/her IEP, he or she should contact the building case conference coordinator immediately.

**WITHDRAWAL FROM CLASS**
Each class lost from a student’s schedule will be recorded as a WD only if a student is passing at the time of withdrawal. A student who is failing at the time of withdrawal will receive a WD/F.
4524 Intro to Accounting 1
4524 Intro to Accounting 2
Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision making. One semester each, one credit each, 10-12th grades, elective. Counts as a Directed Elective or Elective for all diplomas.

4522 Advanced Accounting 1
4522 Advanced Accounting 2
Pre-requisite: Intro to Accounting. Financial Services provides instruction in finance and business fundamentals as they relate to financial institutions, financial planning, business and personal financial services, investment and securities, risk management, and corporate finance. Students are provided opportunities to develop attitudes and apply skills and knowledge in the area of finance. One semester each, one credit each, 11-12th grades, elective. Counts as a Directed Elective or Elective for all diplomas and as a quantitative reasoning course. Qualifies as a CTE Concentrator course for Accounting Pathway.

4560 Business Law and Ethics
Business Law and Ethics provides an overview of the legal system in the business setting. Topics covered include: basics of the judicial system, contract, personal, employment and property law. Application of legal principles and ethical decision-making techniques are presented through problem-solving methods and situation analysis. One semester, one credit 11-12th grades, elective. This course is aligned with postsecondary courses for Dual Credit. A Core 40 Directed Elective or Elective for AHD and THD.

4512 Business Math 1
4512 Business Math 2
Business Math is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including: algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.
• Recommended Grade Level: 10-11
• Recommended Prerequisite: Algebra I
• Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
• Fulfills a Mathematics requirement for the General Diploma only or counts as an Elective or Directed Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
• Qualifies as a quantitative reasoning course

**4516 Computer Illustration & Graphics 1**
**4516 Computer Illustration & Graphics 2**
Computer Illustration and Graphics introduces students to the computer’s use in visual communication. The focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Recommended Pre-requisite: Digital Applications and Responsibility. Two semesters, 1 credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas.

**4801 Computer Science I-1**
**4801 Computer Science I-2**
Computer Science I introduces the structured techniques necessary for the efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. Topics include program flow-charting, pseudo coding, and hierarchy charts as a means of solving problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems; algorithm development and review, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks. Two semester course, 1 credit per semester, 10-12th grades. Required Prerequisite: Introduction to Computer Science or teacher confirmation of student demonstration of mastery of the Intro to Computer Science standards. Two semester course, one credit per semester, 10-12th grades. Counts as a Directed Elective or Elective for all diplomas. *Qualifies as a CTE Concentrator course and as a quantitative reasoning course.*

**5236 Computer Science II-1**
**5236 Computer Science II-2**
Computer Science II explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include: the role of data types, variables, structures, addressable memory locations, arrays and pointers, and data file access methods. An emphasis on logical program design using a modular approach, which involves task-oriented program functions. *Required Prerequisite: Computer Science I. Two semester course, one credit per semester, 10-12th grades. Counts as a Directed Elective or Elective for all diplomas or fulfills a science course requirement for all diplomas. Qualifies as a CTE Concentrator course and as a quantitative reasoning course.*
Computer Science III: Cybersecurity introduces the secure software development process including: designing secure applications, writing secure code designed to withstand various types of attacks, and security testing and auditing. It focuses on the security issues a developer faces, common security vulnerabilities and flaws, and security threats. The course explains security principles, strategies, coding techniques, and tools that can help make software fault tolerant and resistant to attacks. Students will write and analyze code that demonstrates specific security development techniques. Students will also learn about cryptography as an indispensable resource for implementing security in real-world applications. Required Prerequisite: Computer Science I. Two semester course, one credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas or fulfills a science course requirement for all diplomas. Qualifies as a CTE Concentrator course for Computer Science Cybersecurity Pathway and as a quantitative reasoning course.

Information Technology Support allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. One or two semester course, 1-3 credits per semester, 10-11th grade. Required Prerequisite: Digital Applications and Responsibility. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course for PC Support/IT Tech Pathway.

Digital Applications and Responsibility prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software. Students learn what it means to be a good digital citizen and how to use technology, including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision making and problem-solving skills. Students should be provided with the opportunity to seek industry-recognized digital literacy certifications. Two semester course, one credit per semester, 9-12th grades. Counts as a Directed Elective or Elective for all diplomas. This course is aligned with postsecondary courses for dual credit.

The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and “go to” market strategies will be explored through mini case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and
legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting, and business plan development will be presented through extensive use of word processing, spreadsheet and presentation software. One semester, one credit, 12th grade, elective. This course is aligned with postsecondary courses for Dual Credit. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

4518 Introduction to Business 1
4518 Introduction to Business 2
Introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course further develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments. One semester each, one credit each, 9-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.

4803 Introduction to Computer Science
Introduction to Computer Science allows students to explore the world of computer science. Students will gain a broad understanding of the areas composing computer science. Additionally, there is a focus on the areas of computer programming, gaming/mobile development, and artificial intelligence/robotics. One semester course, one credit, 9-12th grades. Counts as a Directed Elective or Elective for all diplomas.

5234 Networking I
5234 Networking 2
Networking I introduces students to local and wide area networks, home networking, networking standards using the IEEE/OSI Model, network protocols, transmission media and network architecture/topologies. Security and data integrity are introduced and emphasized throughout this course, which offers students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs, as well as creating a wireless LAN. Recommended Prerequisite: Computer Tech Support 1. One or two semester course, one to three credits per semester, 11-12th grade. Counts as a Directed Elective or Elective for all diploma. Qualifies as a CTE Concentrator course for PC Support/IT Tech Pathway.

4540 Personal Financial Responsibility
Required course. This course addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals, identify sources of income, saving and investing; understand
banking, budgeting, record-keeping and managing risk, insurance and credit card debt. One semester, one credit, 9-12th grades. A Core 40 directed elective or elective for AHD and THD. Qualifies as a Quantitative Reasoning

4562 Principles of Business Management 1  
4562 Principles of Business Management 2  
Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized. One semester, one credit, 11-12th grades. This course is aligned with postsecondary courses for Dual Credit. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course for Accounting Pathway.

5914 Principles of Marketing 1  
5914 Principles of Marketing 2  
This course provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. This course is aligned with postsecondary courses for Dual Credit. Two semesters, one credit each, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course for Marketing Management Pathway.

5984 Sports and Entertainment Marketing 1  
5984 Sports and Entertainment Marketing 2  
This is a specialized marketing course that develops student understanding of the sport/event industries, their economic impact, and products; distribution systems and strategies; pricing considerations; product/service management, and promotion. Students acquire an understanding and appreciation for planning. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical--thinking skills. Participation in cooperative education is an optional instructional method, giving students the opportunity to apply newly acquired marketing skills in the workplace. Emphasis is placed on financing, marketing, management, pricing, product promotion, and selling. One semester each, one credit each, 11-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.

5918 Strategic Marketing 1  
5918 Strategic Marketing 2  
Strategic Marketing builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology and economics. The relationship between consumer behavior and marketing activities will be reviewed. Principles of
Marketing is recommended as a prerequisite. Two semesters, one credit each, 11-12th grade. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course for Marketing Management Pathway.

4574 Web Design
This course provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Through hands-on experiences students will learn to use various software programs for creating digitally-generated or computer-enhanced media. Required Prerequisite: Digital Applications and Responsibility. One semester, one credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas.
**ENGINEERING AND TECHNOLOGY EDUCATION**

4780 Communication Systems
This course explores the application of tools, materials, and energy in designing, producing, using and assessing communication systems. Students will produce computer- aided drawings, graphic products, photographs, and electronic messages. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4790 Introduction to Communications
This is a specialized course that explores the technological processes used to produce both graphic and electronic media. The student will further explore the areas of sketching, drafting, desktop publishing, electronic communication systems, radio and telecommunications, and message design and production. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4794 Introduction to Design Processes
This course introduces the student to the design processes used in industry. The student will learn how a product is designed for appearance and function. Students will also learn how structures are designed and constructed. Learning will be achieved through the production of products and construction of models. One semester, one credit, 10-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4806 Technology Enterprise
Students will utilize the manufacturing systems and processes in producing a product. Students will accomplish this through simulating the set-up and operation of a manufacturing company. One semester, one credit, 10-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4800 Computers in Design and Production 1
4800 Computers in Design and Production 2
In this course students learn how computers are used in the design and production of products. This course will primarily focus on computer-aided drafting (CAD) of mechanical parts and architectural structures. Opportunity also exists for students to become familiar with robotics and computer-controlled machining tools. Two semesters, two credits, 9-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.
4808 Technology Systems 1
A course investigating the technologies involved in industrial engineering, business
and information systems/human service professions, and selected art and
humanities occupations. The course incorporates problem solving, investigation of
career opportunities, and computer graphics, simulations, and control systems.
One Semester, one credit, 11-12th grades. A core 40 directed elective or elective
for AHD and THD. This course also counts as a Career Academic Sequence,
Career-Technical Program, or Flex Credit course.

4784 Introduction to Manufacturing
This is a “hands-on” introductory course that will allow the student to explore the
different types of materials used by manufacturing systems in today’s world of
work. The types of materials could include woods, plastics, metals, ceramics,
finishing materials, etc. This process exposes the student to design process,
production techniques, and various materials utilized in manufacturing systems.
One semester, one credit, 9-12th grades. A core 40 directed elective or elective
for AHD and THD. This course also counts as a Career Academic Sequence, Career-
Technical Program, or Flex Credit course.

4786 Transportation Systems
This course explores the application of tools, materials, and energy in designing,
producing, using, and assessing transportation systems. Hands-on experiences will
be included, such as testing electrical vehicles, model watercraft, model aircraft,
and/or model rockets. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4798 Introduction to Transportation
This course explores the processes used to move people and cargo in vehicles on
land, in water, air, and space. Hands-on experiences will be included, such as
testing electrical vehicles. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4782 Construction Systems
This course explores the application of tools, materials, and energy in designing,
producing, using, and assessing constructed works. Students will explore
techniques used to apply technology in producing residential, commercial, and
industrial buildings, and a variety of civil structures. One semester, one credit, 9-
12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.

4792 Introduction to Construction
In this course students will study construction topics including preparing the site,
doing earthwork, setting footings and foundations, building the superstructure,
enclosing the structure, installing systems, finishing the structure, and completing
the site. In addition, students will have an opportunity to investigate buying and
maintaining a structure. One semester, one credit, 9-12th grades. A core 40
directed elective or elective for AHD and THD. This course also counts as a Career
Academic Sequence, Career-Technical Program, or Flex Credit course.

Project Lead The Way® Program Courses

Project Lead The Way provides students the opportunity to explore, through hands-
on experiences, what the field of engineering is all about. Project Lead The Way
(PLTW) is a series of courses taken throughout a student’s high school career that
initially introduces students to the field of engineering, and for those students who
find this is the field for them, prepares them to be successful in college engineering
programs.

The sequence for PLTW Engineering courses is as follows:
1st Introduction to Engineering & Design 1 & 2
2nd Principles of Engineering 1 & 2
3rd Civil Engineering and Architecture 1 & 2
4th Engineering Design & Development 1 & 2

4812 Introduction to Engineering & Design 1
4812 Introduction to Engineering & Design 2

This is a PLTW course. In this course students will learn problem solving skills,
using a design development process. Models of product solutions are created,
analyzed, and communicated using Inventor Software. This is an introductory
course for Project Lead The Way, which introduces students to the scope, rigor,
and discipline of engineering. Students who do not intend to pursue further formal
education will also benefit from the knowledge and logical thought processes that
result from taking this course. Students must take a college prep mathematics
class while taking this course. Two semesters, two credits, (one credit per
semester) 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4814 Principles of Engineering 1
4814 Principles of Engineering 2

Prerequisite: Introduction to Engineering and Design 1 & 2. This is a PLTW course.
Principles of Engineering is a broad-based survey course designed to help
students understand the field of engineering and engineering technology and its
career possibilities. Students will develop engineering problem solving skills that
are involved in post-secondary education programs and engineering careers. They
will also learn how engineers address concerns about the social and political
consequences of technological change. Two semesters, two credits, (one credit per
semester) 10-12th grades. A core 40 directed elective or elective for AHD and THD.

4820 Civil Engineering and Architecture 1
4820 Civil Engineering and Architecture 2

Pre-requisite: Introduction to Engineering and Design 1 & 2 and Principles of
Engineering 1 & 2. MCS is a Project Lead The Way school corporation. This
course introduces students to the fundamental design and development aspects of
architectural and civil engineering activities. Application and design principles will
be used in conjunction with mathematical and scientific knowledge. Computer
software programs allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, distribution and logistics, water resources, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that affect the project design. Two semesters, two credits, (one credit per semester) 11-12th grades. A core 40 directed elective or elective for AHD and THD. This course also counts as a Quantitative Reasoning course.

4828 Engineering Design & Development 1
4828 Engineering Design & Development 2
This is a capstone course taken during the student's senior year. Students will develop critical thinking and problem-solving skills through instructional activities that pose design and application challenges for the student to develop solutions. Students may participate in an internship experience with a local engineering firm or work on self-directed projects under the supervision of the PLTW instructor. Examples of projects may include robotics, remote-control devices, or solar-powered devices. Pre-requisite: Civil Engineering and Architecture 1 & 2. Two semesters, two credits, (one credit per semester) 12th grade. A core 40 directed elective or elective for AHD and THD. This course counts as a Quantitative Reasoning course.

4826 Digital Electronics 1
4826 Digital Electronics 2
Pre-requisite: Introduction to Engineering and Design 1 & 2 and Principles of Engineering 1 & 2. This is a PLTW additional course and is not a required course in the PLTW sequence. This course introduces students to applied digital logic, a key element of careers in engineering and engineering technology. Students learn about the smart circuits found in watches, calculators, video games, and computers. Students use industry-standard computer software in testing and analyzing digital circuitry. They design circuits to solve problems, export their designs to printed circuit auto-routing program and generate printed circuit boards, and use appropriate components to build their designs. Two semesters, two credits, (one credit per semester) 11-12th grades. A core 40 directed elective or elective for AHD and THD.
FAMILY AND CONSUMER SCIENCES

5330 Adult Roles and Responsibilities
This course places primary emphasis on preparing students to live at home with their families or away from home while at college or in an apartment. Students will be assisted in preparing to take the next steps toward adulthood in today’s ever-changing society. This course may include social skills, clothing, wellness, nutrition, consumer choices, community and career responsibilities, and financial management. Career interests will be explored Qualifies as one of the classes to waive Health & Wellness. One semester, one credit, 11-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.

5362 Child Development
Addresses the growth and development of children. Caregivers and future parents will study physical, social, emotional, and intellectual growth of children. This study will help the student progress academically through furthering his/her own expertise in child development and guidance. The class will be project-based and focus on parenting practices and skills that support positive development of children. Includes topics such as pre-natal development, the needs of infants and children, and impacts of heredity, environment, and family and societal crisis on the development of the child. Ways of meeting children’s needs for food, clothing, shelter, and care giving will be explored. Qualifies as one of the classes to waive Health & Wellness. One semester each, one credit each, 9-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.(one credit max)*

5360 Advanced Child Development 1
5360 Advanced Child Development 2
Explores issues of child development and early childhood education with special emphasis on ways of guiding physical, social, emotional, intellectual, moral, and cultural development throughout childhood, including school-age children. Students will discuss practices that promote long-term well-being of children and their families, appropriate intervention strategies with individuals and groups of children, brain/learning research, and ideas for meeting needs of children. Child-related careers will be explored and field-based or school-based experiences will be encouraged. One semester each, one credit each, 10-12th grades. Counts as a Directed Elective and Elective for all diplomas. A Core 40 Directed Elective or Elective for AHD and THD.

5334 Consumer Economics
This class places emphasis on advertising, consumer rights and responsibilities, transportation, housing, food, clothing, health insurance, and the use of the recreation dollar. The rising cost of living makes it important to learn to manage resources in a satisfying way. Field trips, speakers, films, and some laboratory work will be included. Fulfils a Social Studies requirement for General Diploma only. One semester, one credit, 10-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.
5408 Education Professions I-1
5408 Education Professions I-2
Education Professions I provides the foundation for employment in education and related careers and prepares students for study in higher education. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are components. Required Prerequisite: Advanced Child Development. Two semester course, one credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

5404 Education Professions II-1
5404 Education Professions II-2
Education Professions II prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. Required Prerequisite: Education Professions I. Two semester course, one to three credits per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

5336 Human and Social Services I-1
5336 Human and Social Services I-2
Human and Social Services I is an introductory/exploratory course for students interested in careers in human and community services and other helping professions. Areas of exploration include family and social services, youth development, and adult and elder care, and other for profit and non-profit services. This project-based course will help students integrate higher order thinking, communication, leadership, and management processes to conduct investigations in human and social services at the local, state, national, or global/world level. Research and development, interdisciplinary projects, and/or collaboration with community agencies or organizations or student organizations are appropriate approaches. Students will be introduced to human and social services professions through presentations from a variety of guest speakers, job shadowing, field trips and introductory and exploratory field experiences. Service-learning experiences are highly recommended. Two semester course, one credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.
5462 Human and Social Services II-1
5462 Human and Social Services II-2
The course prepares students for occupations and higher education programs related to assisting individuals and families in meeting their potential. Through work-based experiences, students apply the knowledge and skills developed in the Human Services Foundations course. Concentration areas include family and social services, youth development, and adult and elder care. Ethical, legal, and safety issues, as well as helping processes and collaborative ways of working with others, will be addressed. Learning experiences will involve analysis of the influence of culture and socioeconomic factors on individual choices and opportunities, service delivery models, and theoretical perspectives. Student laboratory/field experiences may be either school-based, if available, or as part of an internship in community-based agencies, or a combination of the two. Required Prerequisite: Human and Social Services I. Two semester course, one to three credits per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

5342 Nutrition and Wellness 1
5342 Nutrition and Wellness 2
Introduces students to the lifelong benefits of sound nutrition and wellness practices. Students are encouraged to apply these ideas in their everyday lives. Guidelines for safety, sanitation, storage, and recycling will be explored. Job and career possibilities in the food areas are considered. Encourages students to apply the benefits of nutrition and wellness to their own lives. Individual and family wellness issues will be explored. Job and career possibilities in the food areas are investigated. Dietary guidelines will be discussed and applied to daily living. Lab experience will be included. Qualifies as one of the classes to waive Health & Wellness. One semester each, one credit each, 9-12th grades, elective. A Core 40 Directed Elective or Elective for AHD and THD.

5340 Advanced Nutrition and Wellness 1
5340 Advanced Nutrition and Wellness 2
Includes nutritional needs at various stages of life, technology’s influence on the food we eat, and world concerns such as hunger. Laboratory experiences are encouraged. Nutrition and global concerns will be related and careers explored. Designed for students who are interested in advanced foods and nutritional needs. Topics include nutrition and wellness for individuals and families across the life span, community and world food concerns, impact of technology on the food and health industry, exploration of careers, and management of food-related resources. Recommended prerequisite: student has earned credit in Nutrition and Wellness 1 or 2. One semester each, one credit each, 10-12th grades. Counts as a Directed Elective or Elective for all diplomas.

5456 Nutrition Science Careers I-1
5456 Nutrition Science Careers I-2
Nutrition Science Careers introduces students to careers in nutrition, dietetics, food science, food research and development, food service, and related careers. The course of study includes topics and issues in nutrition; food science topics and
issues; topics related to management of daily living needs of individuals and families; nutrition and foods for children and the elderly; topics related to cleaning and maintenance, purchasing, and food preparation; managing operations in food production, food science, or food research and development establishments. Laboratory experiences with industry applications are a required component of this course of study. Two semester course, one credit per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

5457 Nutrition Science Careers II-1
5457 Nutrition Science Careers II-2

Nutrition Science Careers II builds on content and skills of Nutrition Science Careers I and prepares students for careers and higher education programs related to nutrition, dietetics, food science, food research and development, and related careers that focus on assisting individuals and families in managing their personal, family, and social needs regarding nutrition, diet, and foods. The course of study includes, but is not limited to: advanced topics and issues in nutrition; topics and issues related to maintaining the food supply; topics related to cleaning and maintenance, purchasing, and food preparation; managing operations in food production, food science, or food research and development establishments; providing for the dietary needs of persons with special requirements; related research, development, and testing. Ethical, legal, and safety issues, as well as helping processes and collaborative ways of working with others are to be addressed. Intensive laboratory experiences with industry applications are a required component of this course of study. Internship experiences in food and nutrition science careers are strongly encouraged. Required Prerequisite: Nutrition Science Careers I. Two semester course, one to three credits per semester, 11-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course.

5364 Interpersonal Relationships

This is a study of individual behavior in a contemporary society. Emphasis is on understanding one’s own needs, values, decision making, and attitudes toward self and others, as well as skills that are needed to create caring and respectful relationships in the family and workplace. This course will help foster personal development to get along with parents, grandparents, peers, and others. Qualifies as one of the classes to waive Health & Wellness. One semester, one credit, 9-12th grades, elective. Counts as a Directed Elective or Elective for all diplomas. Qualifies as one of the F&CS courses a student can take to waive the Heath & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses.

5350 Introduction to Housing and Interior Design

This course is fashioned for students interested in home design and furnishings. Some activities include field trips, speakers from various fields of home design, planning furnishings of a home, and drawing a home plan. Topics may include housing to meet special needs, principles of design related to interiors, housing, and architecture; floor planning skills; and housing-related careers. One semester, one credit, 11-12th grades, elective. Student must have 3 courses to fulfil
requirements.  Counts as a Directed Elective or Elective for all diplomas. Counts as a Fine Art requirement for the Core 40 AHD.

5380 Introduction to Fashion and Textiles
This class addresses skills related to design, production, and distribution in the textiles, fashion, and home arts industries. Topics include exploration of textiles and fashion industries; design in textiles and apparel; social, psychological, cultural, and environmental aspects of clothing; related equipment and tools and technology that impact the industry; and construction and alteration skills. One credit, one semester, 9-12th grades. Counts as a Directed Elective or Elective for all diplomas. Fulfils the Fine Arts requirement for the Core 40 AHD.

5394 Preparing For College and Careers
This course addresses the essential knowledge, skills, and behaviors that all students need. This course is project-based and emphasizes individual and family topics. Topics that may be addressed are exploration of personal aptitudes, career and life skills, ways to transfer school skills to life and work, decision-making, and organizational skills. This is a foundational course and teaches life skills essential for all high school students. One semester, one credit, 10-12th grades. Counts as a Directed Elective or Elective for all diplomas. Qualifies as one of the F&CS courses a student can take to waive the Heath & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses.
FINE ARTS - MUSIC

4160 Beginning Concert Band 1(L) (Varsity Band)
4160 Beginning Concert Band 2(L) (Varsity Band)
This course is provided for students with developing instrumental performance skills. This course offers a variety of activities in the course of a year. Instruction is designed to enable students to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Time outside the school day may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside the school day that support and extend the classroom. One to eight semesters, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4170 Advanced Honors Concert Band 1(L) (Symphony Band)
4170 Advanced Honors Concert Band 2 (L) (Symphony Band)
This course is provided for students with highly developed instrumental performance skills. This course offers a variety of activities in the course of a year. Advanced Concert Band provides students with a balanced comprehensive study of music. Activities are designed to develop elements of musicianship including, but not limited to, tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, and studying historically significant styles of literature. Experiences include, but are not limited to, improvising, conducting, playing by ear, and sight-reading. Time outside the school day may be scheduled for dress rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside the school day that support and extend the classroom. Band repertoire must be of the highest caliber. Mastery of advanced wind band technique must be evident. Areas of refinement consist of advanced techniques including, but not limited to, intonation, balance and blend, breathing, tone production, tone quality, technique, rhythm, sight-reading, and critical listening skills. Evaluation of music and music performances are included. One to eight semesters, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4142 Dance Choreography 1 (Color Guard)
4142 Dance Choreography 2 (Color Guard)
A wide variety of learning activities, materials, and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi-styled and multicultural performance expressions. Students experience and learn to use appropriate terminology to describe, analyze, interpret, and critique dance compositions by professional individuals. Time outside the school day may be scheduled for dress rehearsals and performances. Public performances will serve as a culmination of daily rehearsal and performance goals. Students are required to participate in performance opportunities outside the school day that support and extend the classroom. 2 semesters, one credit per semester, including grades 9-12. A core 40 directed elective or elective for AHD and THD.
4164 Jazz Ensemble 1 (L)  
4164 Jazz Ensemble 2 (L)  
This course is provided for advanced instrumental music students. Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of the varied styles of instrumental jazz. The instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvising, performing, listening, and analyzing. A limited amount of time outside the school day may be scheduled for dress rehearsals and performances. In addition, a limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students must participate in performance opportunities outside the school day that support and extend learning in the classroom. One to eight semesters, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4182 Beginning Chorus/Singers/Mixed (L)  
4182 Beginning Chorus/Singers/Women (L)  
This is a non-auditioned mixed choir. Opportunity is also available for participation in a non-auditioned female chorus. Activities in this class are designed to cover many styles and aspects of music. Students must participate in rehearsal and performance opportunities outside the school day that support and extend learning in the classroom. Outfit cost, if any, is minimal, and fund raising opportunities are provided. Activities in this class create the development of quality repertoire in the different styles of choral literature. Students need to work with their counselor in selecting appropriate sections of the class. One to eight semesters, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4186 Intermediate Chorus/Sweethearts (L)  
This is a non-auditioned mixed choir. Activities in this class are designed to cover many styles and aspects of music. Students must participate in rehearsal and performance opportunities outside the school day that support and extend learning in the classroom. Outfit cost, if any, is minimal, and fund raising opportunities are provided. Four semesters of Beginning Chorus are recommended as a pre-requisite or with permission of the director. One to six semesters, one credit each, 11-12th grades. A core 40 directed elective or elective for AHD and THD.

4188 Advanced Chorus (L)  
4188 (Swing Choir)  
4188 (Select)  
4188 Sensations  
Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. The Advanced Chorus may be composed of female chorus or mixed chorus. Activities in this class focus on vocal technique, sight-reading, and performance of a wide variety of literature with an emphasis on choreography as appropriate. A special outfit for performances will be required. Fund raising opportunities are provided. One to six semesters, 1 credit each, 10-12th grades. A core 40 directed elective or elective for AHD and THD.
4206 Music History and Appreciation
This course is for students who are interested in learning about many styles and forms of music by listening to, reading about, and analyzing the music of various cultures and time periods. Students may have opportunities to attend live concerts, examine relationships between music and other disciplines, research a particular style of music, or complete a creative project related to the course. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4208 Music Theory and Composition I (L)
This course is for students who are seriously interested in studying the structure and analysis of music. Students will examine the fundamentals of music theory through written and aural exercise. Students will develop skills in ear training and dictation, compose works that illustrate mastered concepts, understand harmonic structures and analysis, understand modes and scales, study a wide variety of musical styles, study traditional and non-traditional music notation and sound sources as tools for musical composition, and receive detailed instruction in other basic elements of music. Experience in vocal or instrumental music is recommended. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4208 Music Theory and Composition II (L)
This course will build on sequential learning experiences in developing skills in the analysis of music and theoretical concepts. Students will study a wide variety of musical styles and practice music arranging and composition. Students will build on basic skills in ear training and dictation skills, composing works that illustrate mastered concepts, understanding harmonic structures and analysis, understanding modes and scales, studying a wide variety of musical styles, studying traditional and non-traditional music notation and sound sources as tools for musical composition, and receiving detailed instruction in other basic elements of music. Experience in vocal or instrumental music is recommended. Students will have the opportunity to experience live performances by professionals during and outside the school day. One semester, one credit, 9-12th grades. A core 40 directed elective or elective for AHD and THD.
FINE ARTS - THEATRE

4244 Technical Theatre 1 (L)
Technical Theatre combines the theories of design and stagecraft with the construction and operation of the various elements of technical theatre. Students will have opportunities to develop stagecraft skills; learn various techniques in scenery, lighting, sound, properties, costumes, and makeup; practice theatre safety, and learn effective stage management, business plans, and promotional techniques. One semester, one credit, 9-12th grades, elective. A core 40 directed elective or elective for AHD and THD.

4244 Technical Theatre 2 (L)
Technical Theatre combines the theories of design and stagecraft with the construction and operation of the various elements of technical theatre. Students will have opportunities to develop stagecraft skills, learn various techniques in scenery, lighting, sound, properties, costumes, and makeup; practice theatre safety, and learn effective stage management, business plans, and promotional techniques. Additionally, students may explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community. One semester, one credit, 9-12th grades, elective. A core 40 directed elective or elective for AHD and THD.

4246 Theatre Arts History
Instruction in this course provides students with sequential learning activities designed to explore the nature of theatre and its major style periods. Students learn context by examining the impact of film, television, and electronic media upon theatre as a whole. Students will study plays that reflect a wide variety of styles, historical periods, and cultures; study the elements of theatrical work including exposition, rising action, climax, and conclusion, and study the elements of play production. One semester, one credit, 9-12th grades, elective. A core 40 directed elective or elective for AHD and THD.

4242 Theatre Arts (L)
Students will learn to improvise and write plays or scenes, imaginatively express thoughts, feelings, moods, and characters, and apply techniques involving voice, gesture, facial expression, and body movement to reproduce the subtleties of language and voice inflection in conveying emotion and meaning. Students will develop skills enabling them to speak clearly and expressively with appropriate articulation, pronunciation, volume, stress, rate, pitch, inflection, and intonation. Through the study of technical theatre and scripts, students will focus on solving the problems faced by actors, directors, and technicians. One semester, one credit, 10-12th grades, elective. A core 40 directed elective or elective for AHD and THD.

4248 Theatre Production (L)
Instruction in Theatre Production is a co-curricular laboratory for the exploration, development, and synthesis of all of the elements of theatre. Practical hands-on experiences in acting, directing, and stagecraft will be provided through the
preparation and public performances of one or more plays. The production of a 
play supplements the Technical Theatre and Theatre Arts courses, which 
concentrate on theories, information, and techniques, by providing for the 
integration and implementation of those ideas and skills. One semester, one credit, 
10-12th grades, elective. *A core 40 directed elective or elective for AHD and THD.*

4210 Advanced Theatre Arts (L)
This course builds on the progressive, sequential learning experiences of Theatre 
Arts. Students will read and analyze plays and will draw on events and experiences 
to create scripted monologues and scenes. They will create scenic designs for 
eexisting plays and will build characters through observation, improvisation, and 
script analysis. These activities will incorporate elements of theatre history, culture, 
analysis, response, creative process and integrated studies. This class offers an in- 
depth study of technical design and acting. One semester, one credit, 11-12th 
grades, elective. *A core 40 directed elective or elective for AHD and THD.*

0518 Musical Theatre
Musical Theatre is based on the Indiana Academic Standards for Theatre. 
Students in this course study the history of musical theatre and its place in today’s 
society. They participate in staging, choreographing, rehearsing, and performing an 
original or existing musical work. This class may be taught collaboratively among 
music, theatre, dance, and visual arts faculty. These activities should incorporate 
elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the 
theatre, attend and critique theatrical productions, and recognize the 
responsibilities and the importance of individual theatre patrons in their community.
- **Recommended Grade Level:** 9, 10, 11, 12  
- **Recommended Prerequisites:** none  
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows 
for successive semesters of instruction at an advanced level provided that defined 
proficiencies and content standards are utilized.  
- **Counts as a Directed Elective or Elective for alldiplomas** 
- **Fulfills a Fine Arts requirement for the Core 40 Academic HonorsDiploma**  
- **Laboratory course**

4250 Advanced Acting
Advanced Acting is based on the Indiana Academic Standards for Theatre. 
Students enrolled in Advanced Acting research, create, and perform 
characters through script analysis, observation, collaboration and rehearsal. These 
activities should incorporate elements of theatre history, culture, analysis, 
response, creative process and integrated studies. Additionally, students explore 
career opportunities in the theatre by attending plays, meeting actors and 
discussing their work, and becoming theatre patrons in their community.  
- **Recommended Grade Level:** 10, 11, 12  
- **Recommended Prerequisites:** Theatre Arts  
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course 
allows for successive semesters of instruction at an advanced level provided that 
defined proficiencies and content standards are utilized.  
- **Counts as a Directed Elective or Elective for alldiplomas**  
- **Fulfills a Fine Arts requirement for the Core 40 Academic HonorsDiploma**  
- **Laboratory Course**

40
FINE ARTS – VISUAL ARTS

4000 Introduction to Two-Dimensional Art (L)
This course is an introductory course that engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. Students are introduced to two-dimensional design problems in the areas of drawing, painting, printmaking, computer graphics, and commercial design. Basic elements of design such as value, composition, texture, line, and color theory and how these are used in solving two-dimensional design problems are stressed. One semester each, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4002 Introduction to Three-Dimensional Art (L)
This course is an introductory course that engages students in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. This course introduces students to three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as wood, metal, plastics, clay, and fibers. Students will create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources. One semester each, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

Advanced Two-Dimensional Art Courses

4004 Advanced Two-Dimensional Art I-I (L)
Pre-course recommendation is Introduction to Two-Dimensional Art (L). This course builds on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and leads to the creation of portfolio quality works. Students will create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources.

Students will develop and apply painting skills using a variety of media, tools, and processes to create works that reflect an understanding of core concepts, create works of art that demonstrate an understanding of color theory (mixing, schemes, uses/symbolism, and effects produced), and research the history of art objects and styles to determine their origin, history, and meaning and relate these findings to
their own work. One semester each, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.

4004 Advanced Two-Dimensional Art I-2 (L)
This course builds on the sequential learning experiences of Advanced Two-Dimensional Art I that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. Students will create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources.

Students will develop and apply painting skills using a variety of media, tools, and processes to create works that reflect an understanding of core concepts, create works of art that demonstrate an understanding of color theory (mixing, schemes, uses/symbolism, and effects produced), and research the history of art objects and styles to determine their origin, history, meaning and relate these findings to their own work. Students will demonstrate skill in observation from real life to the present creating convincing, accurately rendered objects in a variety of media. One semester each, one credit each, 10-12th grades. A core 40 directed elective or elective for AHD and THD.

4004 Advanced Two-Dimensional Art II-I (L)
This course builds on the sequential learning experience of Advanced Two-Dimensional Art II that encompasses art history, art criticism, aesthetics, and production leading to the creation of portfolio quality works. Students will create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources.

Students will develop and apply painting skills using a variety of media, tools, and processes to create works that reflect an understanding of core concepts, create works of art that demonstrate an understanding of color theory (mixing, schemes, uses/symbolism, and effects produced), and research the history of art objects and styles to determine their origin, history, meaning and relate these findings to their own work. Students will demonstrate skill in observation from real life to the present creating convincing, accurately rendered objects in a variety of media. Students will list and describe the similarities and differences in common within the artwork from various Western and non-Western cultures. One semester, each, one credit each, 10-12th grades. This A core 40 directed elective or elective for AHD and THD.

4004 Advanced Two-Dimensional Art II-2 (L)
This course builds on the sequential learning experiences of Advanced Two-Dimensional Art III that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. Students create works of art, reflect upon the outcomes of those experiences, explore historical
connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources.

Students will develop and apply painting skills using a variety of media, tools, and processes to create works that reflect an understanding of core concepts, create works of art that demonstrate an understanding of color theory (mixing, schemes, uses/symbolism, and effects produced), and research the history of art objects and styles to determine their origin, history, meaning and relate these findings to their own work. Students will list and describe the similarities and differences in common within the artwork from various Western and non-Western cultures. Additionally, students will begin the selective development of their professional portfolio and develop presentation skills to enhance the appearance of their work. One semester each, one credit each, 11-12th grades. A core 40 directed elective or elective for AHD and THD.

4050 AP Studio Art 2 D-1 (L)  
4050 AP Studio Art 2 D-2 (L)  
Based on content established by the College Board. Portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on written examination; instead, students submit portfolios for evaluation at the end of the school year. Two semesters, two credit course, 9th-12th grade.

Advanced Three-Dimensional Art Courses

4006 Advanced Three-Dimensional Art I-I (L)  
Pre-course recommendation is Introduction to Three-Dimensional Art (L). This course builds on sequential learning experiences and offers a more in-depth study of the basics covered in introduction to Three-Dimensional Art that encompasses art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. This course provides students with advanced three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as wood, metal, plastics, clay and fibers. Students will create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media. One semester each, one credit each, 9-12th grades. A core 40 directed elective or elective for AHD and THD.
4006 Advanced Three-Dimensional Art I-2 (L)
This course builds on sequential learning experiences of Advanced Three-Dimensional Art I that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. This course introduces students to three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as wood, metal, plastics, clay, and fibers. Students create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media. Students will create works of art that demonstrate the ability to plan, organize, and complete a project. One semester each, one credit each, 10-12th grades. A core 40 directed elective or elective for AHD and THD.

4006 Advanced Three-Dimensional Art II-I (L)
This course builds on sequential learning experiences of Advanced Three-Dimensional Art II that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. This course provides students opportunities to explore three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as wood, metal, plastics, clay, and fibers. Students create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media.

Students will create works of art that demonstrate the ability to plan, organize, and complete a project. The history of art objects and styles will be researched to determine their origin, their history, and their meaning as related to the student’s own work. One semester each, one credit each, 10-12th grades. A core 40 directed elective or elective for AHD and THD.

4006 Advanced Three-Dimensional Art II-2 (L)
This course builds on sequential learning experiences of Advanced Three-Dimensional Art III that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. In this course students study advanced three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as
wood, metal, plastics, clay, and fibers. Students create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media.

Students will create works of art that demonstrate the ability to plan, organize, and complete a project. The history of art objects and styles will be researched to determine their origin, their history, and their meaning as related to the student’s own work. Students will list and describe the similarities and differences in common within the three-dimensional artwork and artifacts from various Western and non-Western cultures. One semester each, one credit each, 11-12th grades. A core 40 directed elective or elective for AHD and THD.

4052 AP Studio Art 3 D-1 (L)
4052 AP Studio Art 3 D-2 (L)

Based on content established by the College Board. Portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on written examination; instead, students submit portfolios for evaluation at the end of the school year. Two semesters, two credit course, 9th-12th grade.
1002 Honors English 9-1
1002 Honors English 9-2
Honors English integrates literature, composition, advanced vocabulary study, and oral communication. Students develop their use of language and literature as a tool for critical and analytical thinking and as a source of pleasure. It utilizes a literacy canon from different cultures and time periods of general literature for a source of understanding of the world. Emphasis is placed on various literary genres. Composition components include persuasive writing, reasoning to support a hypothesis, research, special projects, related papers, annotated bibliographies, and use of the Modern Language Association (MLA) format. Oral communication emphasizes effective presentation of literature related projects, opportunities for impromptu, informative, and persuasive communications, and defense of point of view in discussion. One semester each, one credit each, meets 9th grade requirements. Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.

1002 English 9-1
1002 English 9-2
English 9, an integrated English course based on Indiana’s Academic Standards for English/Language Arts in Grade 9, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.
- Recommended Grade Level: Grade 9
- Recommended Prerequisites: None
- Credits: 2 credits, a two-semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

1010 English/Language Arts Lab
1010 English/Language Arts Lab
Students who have not met required test proficiency or who are placed by department chair/data coach/counselor recommendations. This course is for students who need additional support in reading comprehension and writing skill development. This course will focus on the Indiana Academic Standards for
reading and writing, with a concentration on remediating for grade 10 ECA &/or ISTEP+ assessments. One semester each, one credit each, for students in grades 9-12 This course does not meet English credit requirements for graduation, but does provide 1 up to 4 elective credits. This class may be taken more than one semester, as deemed necessary.

1004 Honors English 10-1
1004 Honors English 10-2
This course integrates literature, composition, advanced vocabulary study focusing on SAT preparation, and oral communication. Literature selections frame the basis for exploring the reasoning process through analysis and interpretation and extensive essay writing. Students will be expected to complete a research project. Opportunities will be presented for impromptu, informative, and persuasive discussions, oral presentations, and defense of point of view.

The composition component of this course will provide students with an understanding of the elements of descriptive, narrative, and expository writing, citing support passages from literature to defend written arguments, point of view, informed opinion, and written responses on a topic. An SAT preparatory unit on vocabulary development is emphasized. This course expects students to produce a far greater volume, complexity, and depth of reading and writing than English 10. One semester each, one credit each, meets 10th grade requirements. A Core 40, AHD, and THD course.

1004 English 10-1
1004 English 10-2
English 10, an integrated English course based on Indiana’s Academic Standards for English/Language Arts in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.
• Recommended Grade Level: Grade 10
• Recommended Prerequisites: English 9 or teacher recommendation
• Credits: 2 credits, a two-semester course with 1 credit per semester
• Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

1006 English 11-1
1006 English 11-2
1006 English 11-1/ English 111 Ivy Tech
1006 English 11-2/ English 111 Ivy Tech
English 11, an integrated English course based on the Indiana’s Academic Standards for English/Language Arts in Grade 11, is a study of language, literature, composition,
and oral communication with a focus on exploring characterization across universal themes in a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade--appropriate multimedia presentations and access, analyze, and evaluate online information.

- Recommended Grade Level: Grade 11
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Credits: 2 credits, a two--semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

1008 **English 12-1**
1008 **English 12-2**
1008 **English 12/English 112 Ivy Tech**
1008 **English 12/ English 112 Ivy Tech**

*English 12, an integrated English course based on Indiana’s Academic Standards for English/Language Arts for Grade 12, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports, resumes and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade--appropriate multimedia presentations and access, analyze, and evaluate online information*

- Recommended Grade Level: Grade 12
- Recommended Prerequisites: English 9, English 10, and English 11 or teacher recommendation
- Credits: 2 credits, a two--semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

1056 **AP English Language and Composition 1**
1056 **AP English Language and Composition 2**

AP English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and reading will make students aware of the interactions among a writer’s purposes, audience expectations, and subjects, as well as the way conventions and the resources of language contribute to effectiveness in writing.
The AP English Language and Composition course allows students to write in a variety of forms—narrative, exploratory, expository, and argumentative—and on a variety of subjects. Its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers.

Students will be expected to take the AP exam upon completion of the course. One semester each, one credit each, 11-12th grades, meets 11th grade requirements. *Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.*

**1058 AP English Literature and Composition 1**

**1058 AP English Literature and Composition 2**

The AP English Literature and Composition course will engage students in the careful reading and critical analysis of imaginative literature. As they read, students will consider a work’s structure, style, and themes as well as much smaller-scale elements such as the use of figurative language, imagery, symbolism, and tone.

Writing will be an integral part of the AP English Literature and Composition course.

Writing will focus on the critical analysis of literature and will include expository, analytical, and argumentative essays. Although critical analysis will make up the bulk of student writing for the course, well-constructed, creative writing assignments may help students understand how literature is written. The goal of both types of writing assignments is to increase students’ ability to explain clearly what they understand about literary works and why they interpret them as they do.

Students will be expected to take the AP exam upon completion of the course. One semester each, one credit each, 11-12th grades, meets 12th grade requirements. *A Core 40, AHD, and THD course.*

**1094 Expository Writing**

Expository Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the various types of informational writing intended for a variety of different audiences. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style.

Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum. • Recommended Grade Level: 11, 12 • Recommended Prerequisites: English 9, English 10, or teacher recommendation • Credits: 1 semester course, 1 credit per semester • Fulfills an English/Language Arts requirement for all diplomas

**1092 Creative Writing**

Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing, and the style of their own writing. Course can be offered in conjunction with a literature course,
or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum. • Recommended Grade Level: 11, 12 • Recommended Prerequisites: English 9, English 10, or teacher recommendation • Credits: 1 semester course, 1 credit per semester • Fulfills an English/Language Arts requirement for all diplomas

1070 Debate 1
1070 Debate 2
Debate focuses on developing skills for students to become in-depth researchers, technical and persuasive writers, effective communicators, and perceptive listeners. Students gain an understanding of argumentation and persuasion theories and develop skills in logic and analysis. Students also research topics, using a variety of literary and technical genres, organize research, write persuasive cases, and practice public speaking. One semester each, one credit each, 10-12th grades, elective. Each can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.

1060 Etymology
Etymology provides instruction in the derivation of English words and word families from their Latin and Greek origins. It also provides the connotative and denotative meaning of words in a variety of contexts. Students study the origins and meanings of English words. This course introduces students to tools and resources for etymological study and encourages them to be curious about the English language. The analytic study of word history and semantics is reinforced through a written and oral component that involves specific analyses of texts. Students who complete this course are also better prepared for the SAT examination. One semester, one credit, 10-12th grades, elective. Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.

1080 Journalism 1
1080 Journalism 2
Journalism is the study of the art of reporting and the profession of journalists. This course includes the processes involved in news-gathering, reporting and writing news stories, interviewing, graphic design and computerized page layout. This course analyzes trends in print media, including the use of photography to enhance page design, and examines the legal and social responsibilities involved in professional and scholastic print media. This course also evaluates and analyzes journalistic writing through discussions and critiques and examines the ethics of fair and accurate reporting. One semester each, one credit each, 9-12th grades, elective. This course does not meet English credit requirements for graduation. This course counts only as an elective credit for Core 40, AHD, and THD.

1086 Student Media/Newspaper Production 1
1086 Student Media/Newspaper Production 2
This course provides the study of and practice in gathering and analyzing information, interviewing, and note taking for the purpose of writing, editing, publishing for print, and media broadcasting, including student publications. This course includes instruction and practice in effective journalistic writing forms and
techniques as well as layout, design, and typography. The concept of responsible journalism also is discussed. Student publications will conform to an appropriate style guide, such as the Associated Press Stylebook and Libel Manual. Student Publications class offers practical training in publishing the school newspaper. Students plan, publish, market, and distribute their school publications. One semester each, one credit each, 10-12th grades, repeatable. This course does not meet English credit requirements for graduation. This course counts only as an elective credit for Core 40, AHD, and THD.

1086 Student Media/Yearbook Production 1
1086 Student Media/Yearbook Production 2
This course provides the study of and practice in gathering and analyzing information, interviewing, and note taking for the purpose of writing, editing, publishing for print, and media broadcasting, including student publications. This course includes instruction and practice in effective journalistic writing forms and techniques as well as layout, design, and typography. The concept of responsible journalism also is discussed. Student publications will conform to an appropriate style guide, such as the Associated Press Stylebook and Libel Manual. Student Publications class offers practical training in publishing the school yearbook. Students plan, publish, market, and distribute their school publications. One semester each, one credit each, 10-12th grades, repeatable. This course does not meet English credit requirements for graduation. This course counts only as an elective credit for Core 40, AHD, and THD.

1084 Mass Media 1
1084 Mass Media 2
Mass Media provides a study of television, film, newspaper, radio, and videotape as sources of information, persuasion, and creative expression. This course helps students develop an awareness of audience and purpose in evaluating mass media, as well as in producing their own media productions. It will also help students to judge media critically and understand the use of persuasive language and strategies. Opportunities are provided for students to generate material for mass media, such as radio and television material, slide-tape presentations, film, and newspaper articles. One semester, one credit, 10-12th grades, elective. This course does not meet English credit requirements for graduation. This course counts only as an elective credit for General, Core 40, AHD, and THD.

1076 Speech 1/ COM 101 Ivy Tech
1076 Speech 2/ COM 101 Ivy Tech
Speech provides the study of and practice in the basic principles and techniques of effective oral communication. Students have opportunities to make different types of oral presentations including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students are given opportunities to express subject matter knowledge and content through creative, analytical, and expository writing, as well as reading a variety of literary genres. This course emphasizes research using technology and careful organization and preparation. Students also practice and develop critical listening skills.
Speech 2 will focus on leadership development, listening skills, oral interpretation, parliamentary procedure, discussion, research method, and oral debate. One semester each, one credit each, 9-12th grades, elective. Each can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.

1020 American Literature
American Literature provides an accelerated survey of the literature produced in the United States from pre-Revolutionary times to the present. This course includes a study of representative works of literature that reflect American culture. Students are provided with the study of a variety of literary genres, such as drama, poetry, and prose, as well as Native American folk legends. Influences of classical literature can be experienced in the historical, literary, and cultural contexts. Quality works of various ethnic and cultural minorities are included, as are the works of contemporary writers. Written and oral exercises require students to analyze and explain how their readings of literature, history, and culture are interconnected and distinctly American. One semester, one credit, 11th-12th grades, meets 11th grade requirements. (Can be taken at another grade level with teacher recommendation.) A Core 40, AHD, and THD course.

1022 Biblical Literature
The Bible is read from a literary standpoint in this course. Biblical Literature surveys the Bible as a source of a wide variety of literary genres, patterns, themes, and conventions. Different books from the Bible are read in relation to their times. In addition, this course provides a basis for understanding Biblical references (allusions) in both classical and modern literature. Related literature is included as it pertains to Biblical themes. Writing and discussion opportunities are included in the context of this course. One semester, one credit, 11-12th grades, elective. Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.

1026 Classical Literature
Classical Literature surveys Greek and Roman literature, including a survey of great authors. This course includes the study of a variety of literary genres. Possible themes include the transition from oral to literate cultures, the emergence of cities and empires, the use of mythology, and the rise and fall of democracy. Influences of classical literary patterns, themes, and conventions on modern literature may also be explored. Emphasis is placed on reading, oral discussion, and written discourse. One semester, one credit, 11-12th grades, elective. Can fulfill and English 11 or 12 credit. A Core 40, AHD, and THD course.

1120 Developmental Reading
This course is for students who need additional support in vocabulary development and reading comprehension. This course will focus on the Indiana Academic Standards for reading (standards 1, 2, 3). The nature of this course allows for successive semesters of instruction at advanced levels up to 8 elective credits. One semester each, one credit each, for students who did not meet required test proficiency or who are placed by teacher/counselor recommendation, 9 – 12th grade. This course does not meet English credit requirements for graduation. This course counts only as an elective credit for General, Core 40, AHD, and THD.
1030 English (British) Literature
English Literature provides an accelerated survey of representative literature produced by English-speaking authors, including those in the British Isles as well as those in the former British colonies. This course includes the study of major British authors from the Anglo-Saxon period to the present, literary movements, and intellectual trends. It also provides an examination of the contributions of British authors to specific literary genres. Writing and classroom discussion activities include opportunities for students to respond analytically and reflectively to the literature. One semester, one credit, 11th-12th grades, meets 12th grade requirements. (Can be taken at another grade level with teacher recommendation.) A Core 40, AHD or THD course.

1090 Composition
Composition will provide students with frequent opportunities to write for different audiences and purposes, using a process that includes pre-writing, drafting, peer sharing, revising (content, structure, or presentation), editing (grammar, punctuation, spelling, usage), and producing a final product. For peer sharing, students receive training in providing substantive feedback. Selected readings from American Literature provide models of effective writing techniques and opportunities to evaluate and discuss the writings of others. In addition to providing instruction in writing clear, coherent, and organized text, this course will teach strategies for collecting and transforming data for use in writing and using criteria to evaluate and revise writing. Instruction in grammar, usage, and mechanics will be integrated with writing so that students develop a functional understanding of language and a common vocabulary for discussing writing. American Literature is a pre-course recommendation for enrolling in Composition. It is recommended that students should have received an A or B in English 10 to be enrolled in this course. One semester, one credit, 11th-12th grades, meets 11th grade requirements. (This can be taken at another grade level with teacher recommendation.) Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.

1098 Advanced Composition
Advanced Composition further develops and refines writing skills introduced in other composition courses. This course emphasizes research using technology and careful organization and preparation. This course also provides students frequent opportunities to write. Techniques of persuasive writing and formal argument are studied, and increased emphasis is placed on language and style. Students will do presentations critiquing their own writing. Students will also read and evaluate literary samples of good writing to enhance their own writing. Students in Advanced Composition will be required to write a research paper. English Literature is a pre-course recommendation for enrolling in Advanced Composition. It is recommended that students should have received an A or B in American Literature and Composition to be enrolled in this course. One semester, one credit, 11th-12th grades, meets 12th grade requirements. (This can be taken at another grade level with teacher recommendation.) Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.
1050 Twentieth Century Literature
This course will provide a survey of the literature produced from approximately 1900 to the present. The course may be organized chronologically or thematically; it may also be organized to concentrate on specific authors of the period or specific literary genres. Emphasis may be placed on early twentieth century works (modern period) or more recent works (contemporary period). One semester, one credit, 11th-12th grades, elective. Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.

1044 Poetry
Poetry will provide a study of a variety of types, including epic, romance, lyric, and dramatic poetry. Representative examples of these major types of poetry and their variations are included in this course. Not only does this course focus upon interpretation, but also upon a variety of structures, devices, and themes that differentiate one type of poetry from another. Reading poetry for pleasure is emphasized. One semester, one credit, 11-12th grades, elective. Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.
2554 **Integrated Mathematics 1**  
**2554 Integrated Mathematics 2**  
Integrated Mathematics I formalizes and extends the mathematics students learned in the middle grades. The critical areas deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Integrated Mathematics I use properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grades. The final unit in the course ties together the algebraic and geometric ideas studied. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Recommended Grade Level: 9, 10, 11, 12; Recommended Prerequisites: none; Credits: 2 semester course, 1 credit per semester; Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas Students pursuing Core 40, Core 40 with academics Honors, or Core 40 with Technical Honors diplomas should receive credit for Integrated Mathematics I by the end of Grade 9.

2556 **Integrated Mathematics II-I**  
**2556 Integrated Mathematics II-II**  
Integrated Mathematics II focuses on quadratic expressions, equations, and functions; by comparing their characteristics and behavior to those of linear and exponential relationships from Integrated Mathematics I. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, rounds out the course. The eight Process Standards of Mathematics apply throughout the course. Together with the content standards, the process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Recommended Grade Level: 9, 10, 11, 12; Recommended Prerequisites: Integrated Mathematics I; Credits: 2 semester course, 1 credit per semester; Counts as a Mathematics Course for all diplomas; Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

2558 **Integrated Mathematics III-I**  
**2558 Integrated Mathematics III-II**  
Integrated Mathematics III provides students the opportunity to pull together and apply the accumulation of learning that they have from their previous courses. They apply methods from probability and statistics to draw inferences and
conclusions from data. Students expand their repertoire of functions to include polynomial, rational, and radial functions. They expand their study of right triangle trigonometry to include general triangles. Finally, students bring together all of their experiences with functions and geometry to create models and solve contextual problems. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Recommended Grade Level: 9, 10, 11, 12; Recommended Prerequisites: Integrated Mathematics II; Credits: 2 semester course, 1 credit per semester; Counts as a Mathematics Course for all diplomas; Fulfills the Algebra II/Integrated Mathematics III requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

2520 Algebra I-1
2520 Algebra I-2
This course will provide for, but not be limited to, student learning in the basic properties involving the real number system, solution and evaluation of open sentences (equalities and inequalities), solution of open sentences by graphing (number line and coordinate plane), solution of systems of open sentences, basic operations with polynomials, solution of quadratics, understanding and using elementary functions, and exponentials. One semester each, one credit each, 9-12th grades, required math credits. A Core 40, AHD, and THD course.

2516 Algebra I Lab
2516 Algebra I Lab
Algebra I Lab is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.
• Credits: A two credit course, one credit per semester
• Counts as a Mathematics Course for the General Diploma only or as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
• Algebra Enrichment is designed as a support course for Algebra I. As such, a student taking Algebra Enrichment must also be enrolled in Algebra I during the same academic year.

2531 Math 10
2531 Math 10
Math 10 is a new two-semester course designed to reinforce and elevate the Algebra I and 8th grade geometry knowledge and skills necessary for students to successfully complete high school mathematics beyond Algebra I and essentials
for passing the state’s graduation qualifying exam in mathematics. Enrollment will be contingent upon recommendation of the Algebra I or Integrated Math I teacher based on diagnostic results of performance in Algebra I and/or mathematics competency assessments. The standards for this course are aligned to the state standards that students need to master for success with the state’s graduation qualifying exam in mathematics and the next level math courses. Emphasis is on a variety of instructional methods designed to meet each student’s needs and delivered through competency-based units. Pre- and post-assessment data should be analyzed on a continuous basis to drive instructional design and delivery.

* Recommended Grade Level: 9,10
* Recommended Prerequisites: Students who have attempted a complete year of Algebra I
* Credits: 2 semester course, 1 credit per semester
* Counts as a Mathematics course for the General Diploma only or as an elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

**2560 Math Lab**

Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana’s Academic Standards for Mathematics. It is recommended that Mathematics Lab is taken in conjunction with a Core 40 mathematics course, and the content of Mathematics Lab should be tightly aligned to the content of its corresponding course. Mathematics Lab should not be offered in conjunction with Algebra I or Integrated Mathematics I; instead, schools should offer Algebra Enrichment or Integrated Mathematics Enrichment to provide students with rigorous support for these courses.

- Credits: A one to eight credit elective course
- Counts as an Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Clarifying information can be appended to the end of the course title to denote the content covered in each course
  - Example: Mathematics Lab used to support students in Algebra II can be recorded on the transcript as Mathematics Lab – Algebra II.

**2522 Honors Algebra II-1**

**2522 Honors Algebra II-2**

This course, through an accelerated pace, covers all topics in Algebra II and allows time for enrichment of those topics as well as a rigorous, in-depth study of additional concepts. This course will advance student knowledge of theory, development of formulas, and application of concepts. An introduction to limits and trigonometry will be included. Students must be selected for the Honors program or admitted based on teacher recommendation. Students who completed Algebra I at the middle school level must have obtained a grade of “C” or higher and passed the Algebra I End-of-Course Assessment to be considered for enrollment. One semester each, one credit each, 10-12th grades. A Core 40, AHD, and THD course.
2522 Algebra II-1  
2522 Algebra II-2  
This course will include the properties and operations of real numbers. The course will provide for, but not be limited to, student learning in the use and understanding of functions and functional notation, the use of algebraic theorems and algorithms, the use of graphing and other methods of solving open sentences of higher order including the introduction and use of conics, series, exponential functions, the complex number system, and other advanced algebraic concepts. One semester each, one credit each, 10-12th grades. *A Core 40, AHD, and THD course.*

2532 Geometry 1  
2532 Geometry 2  
This course will stress the uses of deductive reasoning and inductive reasoning in drawing conclusions. It will also deal with fundamental geometric figures and the properties and relationships involving these figures: angles, lines, and planes; congruent triangles; similar triangles; polygons; circles; areas of polygons and circles; areas and volumes of geometric solids; and coordinate geometry. In addition, this course will include formal proof structures and the use of logic in developing these proofs. One semester each, one credit each, 9-12th grades. *A Core 40, AHD, and THD course.*

2546 Probability and Statistics  
This course will develop appreciation for statistical techniques in the analysis of data and also will develop students’ skills in applying these techniques. Topics that should be included are methods of data collection, organization of data, and graphical techniques for exhibiting data together with measures of central tendency and variation. Basic laws of probability, sampling theory, hypothesis testing, and making inferences from samples should be included. Whenever possible, students should plan and conduct experiments or surveys and analyze the resulting data. Use of technology, including graphing calculators and relevant computer programs, will be essential. Algebra II is a Pre-Course Recommendation. One semester, one credit, 11-12th grade. *A Core 40, AHD, and THD course.*

2530 Finite Mathematics/MATH 135 Ivy Tech  
This course is an umbrella of mathematical topics, designed for students who will undertake higher-level mathematics in college which may not include calculus. The unifying topics of the course should be counting, matrices, and recursion. Additional topics may include graph theory, social choice, line programming, game theory, logic, coding theory, queuing theory, set theory, growth patterns, and mathematical induction or further study of probability and statistics. Technologies such as the graphing calculator and computers should be frequently used tools in this course. Algebra II is a pre-course recommendation. One semester, one credit, 11-12th grade. *A Core 40, AHD and THD course.*
2564 **Pre-Calculus/Trigonometry 1**

This course will blend together all of the concepts and skills that must be mastered prior to enrollment in a calculus course. A functional approach will provide for the integration of trigonometric concepts, relationships of equations and graphs, and applications to real world problems. The use of appropriate technology will be essential as students refine their ability to solve and interpret equations and also as they broaden their understanding of functions and their graphs. The course objectives and competencies will include those for trigonometry. One semester each, one credit each, 11-12th grades. *A Core 40, AHD, and THD course.*

2564 **Pre-Calculus/Trigonometry 2**

This course, through an accelerated pace, covers all of the topics in Pre-Calculus/Trigonometry 1 & 2, and allows time for a rigorous in-depth study of additional concepts. A functional approach will provide for the integration of trigonometric concepts, relationships of equations and graphs, and applications to real world problems. The use of appropriate technology will be essential as students refine their ability to solve and interpret equations and also as they broaden their understanding of functions and their graphs. Students will further develop an appreciation of the contributions made by mathematicians such as De Moivre and Euler. Topics include relations and functions, logarithmic and exponential functions, trigonometry in triangles, trigonometric functions, trigonometric identities and equations, polar coordinates and complex numbers, sequences, series, and data analysis. Students in this course will use a TI-84 Silver + calculator. The course objectives and competencies will include those for trigonometry. Algebra I Honors, Geometry Honors, Algebra II Honors (grade of C or better) or teacher recommendation is a pre-course recommendation. One semester each, one credit each, 11-12th grades. *A Core 40, AHD, and THD course.*

2570 **AP Statistics 1**

2570 **AP Statistics 2**

*Statistics, Advanced Placement* is a course based on content established by the College Board. The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Topics include: (1) exploring data: describing patterns and departures from patterns (2) sampling and experimentation: planning and conducting a study, (3) anticipating patterns: exploring random phenomena using probability and simulation, and (4) statistical inference: estimating population parameters and testing hypotheses. The use of graphing calculators and computer software is required.

- **Recommended Grade Level:** Grades 11 or 12
- **Recommended Prerequisite:** Algebra II or Integrated Mathematics III
- **Credits:** 1 or 2 credit course, 1 credit per semester. Due to the level of rigor, it is recommended that AP Statistics be offered as a 2 semester, 2 credit course.
- **Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas**
- **Qualifies as a quantitative reasoning course**
Calculus Advanced Placement is a course that provides students with the content established by the College Board. Students will explore topics that include limits, continuity, derivatives, definite integrals, and techniques of integration involving rational, trigonometric, logarithmic, and exponential functions. The course should also include applications of the derivative, the integral, and theory of calculus. Students will use graphing calculators. Students will be expected to take the AP Exam upon completion of this course. One semester each, one credit each, 12th grade. A Core 40, AHD, or THD course.

This course will provide students with the content which has been established by the College Board. Generally, topics will include limits, continuity, derivatives, definite integrals, and techniques of integration involving rational, trigonometric, logarithmic, and exponential functions. The course should also include applications of the derivative, the integral, and theory of calculus. Students will be expected to take the AP Exam upon completion of this course and will be primarily concerned with an intuitive understanding of the concepts of calculus and experience with its methods and applications. Students will use graphing calculators. One semester each, one credit each, 12th grade. A Core 40, AHD, and THD course.

AP Computer Science A is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The curriculum for AP Computer Science A is compatible with many CSI courses in colleges and universities. Recommended Grade Level: 11, 12; Recommended Prerequisites: Digital Citizenship, Algebra I, and Algebra II; Credits: 2 semester course, 1 credit per semester; Counts as a Mathematics or Elective for all diplomas; Qualifies as a quantitative reasoning course.
The AP Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. The course is not intended to be used as a dual credit course. Recommended Grade Level: 11, 12; Recommended Prerequisite: Algebra I; Credits: 2 semester course, 1 credit per semester; Counts as a Math Course for all diplomas.
0502 Cadet Teaching 2 AM
0502 Cadet Teaching 2 PM
Experience is limited to grades K-5. This course is designed as a field experience for students who are interested in teaching as a profession and are above average in scholarship, citizenship, and attendance. While observing and assisting an experienced teacher, the student gains a better understanding of the role of the teacher and of his/her own aptitude for teaching. Two hours a day are required for the course. Each student must provide needed transportation to the elementary school assignment. Students must submit an application form and be approved by the high school contact person. Students may request an application form from his or her guidance counselor One credit per semester, up to 4 credits. 11-12th grades, elective.

0530 Career Exploration Internship 1
0530 Career Exploration Internship 2
The Career Exploration Internship course is an unpaid work experience in the public or private sector that provides for workplace learning in an area of student career interest. Unlike a Work Based Learning experience in which students gain expertise in a specific occupation, the career exploration internship is intended to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of work sites or departments. In addition to their workplace learning activities, students participate in 1) regularly scheduled meetings with their classroom teacher, or 2) a regularly scheduled seminar with the teacher for the purpose of helping students make the connection between academic learning and their work-related experiences. A clear internship agreement and training plan is developed by the student, teacher, and internship site mentor/supervisor to guide the student’s career exploration experience. One semester course, 1-3 credits per semester, can be taken for multiple semesters, 12th grade. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a method for demonstrating Employability Skills.

0522 Career Information and Exploration 1
0522 Career Information and Exploration 2
Enrollment in this course is only open to students participating in the Jobs for America’s Graduates (JAG) program. The Career Information and Exploration course provides students opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. Students are also provided assistance with improving their reading, math, and writing skills as a part of the program. Students also gain an awareness of the type of occupational preparation or training needed for various occupations and careers. Students develop skills in (1) employability, (2) understanding the economic process, and (3)
decision making and planning. Résumé development experience, career-related testing, and job placement assistance are provided to students. One to two semesters, one credit per semester, 11-12th grade. Credits from this course count as elective credits for all diplomas. These credits can also be used as part of a Career-Sequence or Flex credits for the General Diploma.

0035 Student Assignment 1
0035 Student Assignment 2
This course is designed as a program to give opportunities to students to gain insight into school assignments and related tasks. Each student will be assigned by the school principal or designee to certified personnel who will be responsible for the activities of the assignment. One to eight semesters, NO CREDIT, 9-12th grades.

MCJROTC/ASPE
(Marine Corps Junior Reserve Officer Training Corps/Alternative Supervised Physical Education)

Students may earn 1 of their required PE credits by completing 1 year of MCJROTC with a passing grade.

- The ASPE credit for MCJROTC will only count as a PE credit and does not count as an elective credit for MCJROTC. Students cannot earn the PE credit for being enrolled in a single MCJROTC course.
- Students will meet the remaining PE requirement by taking a semester of PE.

0516 MCJROTC Leadership Training I-1
0516 MCJROTC Leadership Training I-2
This is an introductory course presenting basic knowledge to prepare a cadet for Leadership Education and Training courses to follow. Major emphasis is placed on leadership, citizenship, techniques of communications, customs and courtesies, drill and ceremonies, first aid, map reading, wearing of the uniform, and the cadet challenge physical fitness program. Second semester enrollment requires instructor approval. 9-12th grades, two semesters, one credit each, elective. Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.

0516 MCJROTC Leadership Training II-1
0516 MCJROTC Leadership Training II-2
This is a second-year course which builds on the basic knowledge gained in the introductory courses. This involves a more in-depth study of the introductory course subjects. Leadership positions in the cadet organization are assigned. Instructor approval is required for enrollment. 10-12th grades, two semesters, one credit each, elective. Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.
0516 MCJROTC Leadership Training III-1
0516 MCJROTC Leadership Training III-2
This is a third-year course which builds on the intermediate knowledge gained in MCJROTC I and II. Focus on citizenship development continues as well as instruction in planning and coordinating activities. Leadership and staff positions in the cadet battalion are assigned. Instructor approval is required for enrollment. 11-12th grades, two semesters, one credit each, elective. Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.

0516 MCJROTC Leadership Training IV-1
0516 MCJROTC Leadership Training IV-2
This is a fourth-year course that continues the work for MCJROTC III. Focus is on development of planning, coordinating, and implementing activities. Leadership and staff positions in the cadet battalion are assigned. Instructor approval is required for enrollment. 12th grade, two semesters, one credit each, elective. Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.

0516 MJROTC Staff 1
0516 MJROTC Staff 2

0520 Peer Tutoring 1
0520 Peer Tutoring 2
Peer Tutoring provides high school students with an organized exploratory experience to assist students in kindergarten through grade twelve (K-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It must be conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development of and use of: listening skills, communication skills, facilitation skills, decision-making skills, and teaching strategies. Counts as an Elective for all diplomas. One semester each, one credit each, 10-12th grades (up to 2 credits). Must have permission to enroll.

0082 Post-secondary Credit Program 1
0082 Post-secondary Credit Program 2
This opportunity is designed to give high school students secondary as well as post-secondary credit in approved courses not currently being taught in the high school. Students who intend to enroll in an eligible post-secondary institution under this program must submit an application form within the timeline established by the school. The student or the student’s parent or guardian must assume all financial responsibility imposed by the eligible post-secondary institution for tuition and enrollment fees, as well as any and all transportation costs. Students may request an application form from his or her guidance counselor. 11-12th grades, elective.
The Muncie Area Career Center offers career and technical education training for high school juniors and seniors. A Career & Technical Education (CTE) Pathway is a series of classes focused on a specific career field. Students can achieve the Graduation Pathway Diploma requirement for Postsecondary Ready Competencies by enrolling and obtaining CTE Concentrator status in a career field of study.

A CTE Concentrator is a student who complete the two (2) capstone or final classes in a career and technical education sequence of class focused on a specific career field. A CTE Pathway may include opportunities for the student to:

- Earn dual credits in a CTE Pathway
- Earn Industry Certification
- Participate in an embedded internship or work-based learning experience

CTE Pathways allow students the opportunity to learn more about a specific career field. Students with a career focus prior to high school graduation are better prepared to select the right postsecondary option: Apprenticeship, Community College, University, Certification or Technical Training, Military Service, or other.

Internships and Job Shadowing Experience

- Internship experiences are required in some program areas and optional for others, and sometimes limited to senior level students. The internships are non-paid, and students must meet all required criteria to participate, as well as provide their own transportation.
- All MACC students are required to participate in one job shadowing experience per year. The job shadowing activities include telephone contact with an employer, two letters, observation at the work site, and evaluation essay of the experience.

State & National Certification

Career & Technical Education programs provide students the opportunity to develop the knowledge and skills required for industry certification standards such as:

Certifications:

- Automotive Service Excellence (ASE)
- MSSC Certification: Safety, Quality Practices & Measurement, Manufacturing Processes and Production, and Maintenance Awareness
- National Center for Construction Education & Research (NCCER)
- American Welding Society (AWS)
- Pre-PAC Certification (Pre-Professional Assessment and Certification)
- Comp TIA IT Fundamentals
- Indiana Certified Nursing Assistant (CNA)
- State Board of Cosmetology
- First Responders Certification
WorkKeys Preparation & Testing
Seniors at the Career Center are provided the opportunity to take the WorkKeys examination. The WorkKeys Assessment is part of the National Career Readiness Certification program. The WorkKeys certification is a credential that provides evidence of essential workplace skills and can be used to meet the requirements for a Technical Honors Diploma.

Dual College Credit
Dual credit courses are defined as courses taken by high school students that satisfy requirements for earning credits toward both a high school diploma and a college degree. The Muncie Area Career Center along with Ivy Tech and Vincennes University has established dual-credit agreements for many of the courses offered at the MACC. In order to assist MACC students with preparing for college, all students are provided the opportunity to take the Accuplacer college placement examination on-site. The Accuplacer test results are one of prerequisites for enrolling in dual credit courses. Students enrolled in the dual credit program must meet all college course requirements to earn dual credits.

Arts, AV Technology and Communications Careers

Interactive Media Pathway Courses
1st Semester: Interactive Media (3 CR)
2nd Semester: Graphic Design and Layout (3 CR)

5232 Interactive Media
Interactive Media prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace". Required Prerequisite: Digital Applications and Responsibility. One semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Interactive Media Pathway.

5550 Graphic Design and Layout
Graphic Design and Layout includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. One semester, three credits. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a CTE Concentrator course in the Interactive Media Pathway.
5510 Automotive Services Technology I-1 – First Year Program
5510 Automotive Services Technology I-2
5510 Automotive Services Technology 2-1 – Second Year Program
5510 Automotive Services Technology 2-2

Automotive Services Technology includes classroom and laboratory experiences that incorporate training in service and repair work. Included in the course is training in the use of service/repair information and a variety of hand and power tools. This four-semester course addresses NATEF/ASE standards leading to certification in one or more of the following areas: steering and suspension; brakes; engine performance; manual transmissions and differential; automatic transmissions; electrical systems; air conditioning; and, engine repair. Seniors who meet the requirements may participate in a non-paid internship. Students are required to have their own set of hand tools and suitable clothing. Four-semester course, students may enroll for two, three or four semesters, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Automotive Technology Pathway.

BIOMEDICAL PROGRAM – Project Lead The Way

This program combines the application of computer science and information technology to the fields of biology and medicine. The Biomedical program introduces students to careers in medicine, research, forensic science, pharmacology, genetics, epidemiology, and many other career fields. The program is presented through a series of four courses taken during a student’s junior and senior years.

1st year Courses: Principles of Biomedical Sciences (3 credits)
Human Body Systems (3 credits) (CTE Concentrator Course)

2nd year Courses: Medical Interventions (3 credits) (CTE Concentrator Course)
Medical Innovations (3 credits)

5218 Principles of the Biomedical Sciences (PBS)- 1st Year/First Semester

Prerequisite: Biology with a grade of “C” or better. Introduction to Biomedical Sciences field through “hands-on” projects and problem-based learning. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme throughout the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. One semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas or fulfills a Science requirement for all diplomas.

5116 Human Body Systems (HBS) – 1st Year/Second Semester

Prerequisite: Principles of Biomedical Sciences. Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems
(respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real-world cases and play the role of biomedical professionals to solve medical mysteries. One semester course, three credits per semester, 11-12th grades. **Counts as a Directed Elective and Elective for all diplomas or fulfills a science requirement for all diplomas. Qualifies as a CTE Concentrator course for the Biomedical Sciences Pathway.**

5217 Medical Interventions (MI) – 2nd Year/First Semester
Pre-requisite: Human Body Systems. PLTW Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. One semester course, three credits per semester, 11-12th grades. **Counts as a Directed Elective and Elective for all diplomas or fulfills a science requirement for all diplomas. Qualifies as a CTE Concentrator course for the Biomedical Sciences Pathway.**

5219 Biomedical Innovation (BI) – 2nd Year/Second Semester
Pre-requisite: Medical Interventions. This is the final course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st Century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or post-secondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. One semester course, three credits per semester, 12th grade. Counts as a Directed Elective or Elective for all diplomas.

5580 Construction Trades I-1
5580 Construction Trades I-2
Students learn about the formation, installation, maintenance, and repair of buildings and homes. Students will learn about residential design and work site preparation through participation in the Muncie Homeownership Project. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, and architectural plans will be presented. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will examine the design and construction of floor and wall systems and develop layout and floor construction skills. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-
family dwellings and safety practices including Occupational Safety and Health Administration Safety and Health Standards for the construction industry. Students are required to purchase basic hand tools and clothing appropriate to the construction trades. **NCCER Industry Certification is available. Two semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Construction Pathway.**

**5578 Construction Trades II-1**  
**5578 Construction Trades II-2**  
Students will continue participating in the construction of a house from the foundation to completion of the interior structure as part of a work/internship experience with the Muncie Homeownership Project started in Construction I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. **NCCER Industry Certification is available. Two semester course, three credits per semester, 11-12th grade. Counts as a Directed Elective and Elective for all diplomas and as a quantitative reasoning course. Qualifies as a CTE Concentrator course in the Construction Pathway.**

**4830 Construction Trades – Electrical I-1** (2020-2021 One year course/one semester)  
**4830 Construction Trades – Electrical I-2**  
Construction Trades: Electrical I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of residential structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm’s Law, Watt’s Law, series circuits, series-parallel circuits, and other electrical concepts. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies. Students will participate in the electrical wiring of the Muncie Homeownership project. **NCCER Industry Certification is available Two semester course, 3 credits per semester, 11-12th grade. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Electrical Pathway.**

**4832 Construction Trades – Electrical II-1** (2020-2021 One year course/one semester)  
**4832 Construction Trades – Electrical II-2**  
Students continue participation in the work/internship experience with the Muncie Homeownership Project to complete the electrical wiring of a residential property. This includes electrical service, metering equipment, lighting, switches, outlets and other common components. The course also covers methods of installation and maintenance of the residential wiring system in accordance with the current
Two semester course, 3 credits per semester, 11-12th grade. Counts as a Directed Elective and Elective for all diplomas and as a quantitative reasoning course. Qualifies as a CTE Concentrator course in the Electrical Pathway.

5802 Cosmetology I-1
5802 Cosmetology I-2
5806 Cosmetology II-1
5806 Cosmetology II-2

The Cosmetology curriculum follows the state outlined course of classroom and practical experiences required to achieve the state mandatory 1500 clock hours of training required before an individual can qualify to take the State Board of Cosmetology Examination. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, bleaching, and fitting wigs; permanent waving; facials; manicuring; and, hand and arm massaging. Scientific knowledge related to bacteriology, anatomy, hygiene, and sanitation will be emphasized. Additional instruction in the areas of small business (salon) management, record keeping, and customer relations is also provided in this course. This course requires students to have excellent attendance as students are required to attend class 20 hours per week from 12:00 to 4:00 PM daily as required by the State Board of Cosmetology. Some evening sessions will also be required in order to obtain the required number of skill performances for the Student Progress Book. Upon completion of this two-year program, students are eligible to take the State Board of Cosmetology examination, which will provide them with the required licensing to work as a Hair Stylist in Indiana. Students will be required to purchase a hair kit, black uniforms, and black work shoes. In addition, students must have their own transportation. Two-year program, four credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE concentrator course in the Cosmetology Pathway.

5412 Early Childhood Education I-1
5412 Early Childhood Education I-2

Early Childhood Education prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. Students examine basic principles of child development, importance of family, licensing, and elements of quality care of young children. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; application of basic health, safety, and nutrition principles when working with children; overview of management and operation of licensed child care facilities or educational settings; child care regulations and licensing requirements; and employability skills. Students gain actual experience working with young children by operating the MACC pre-school and students who meet the requirements may participate in a non-paid internship experience. Students must
provide their own transportation to the internship site. Required Prerequisite: 
Advanced Child Development. Two semesters, three credits per semester, 11-12th 
grade. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a 
CTE Concentrator course for the Early Childhood Education Pathway.

5406 Early Childhood Education II-1
5406 Early Childhood Education II-2
In ECE II students further refine, develop, and document the knowledge, skills, 
attitudes, and behaviors gained in the foundational course. Major topics of ECE II 
include: overview of the Child Development Associate (CDA) credential, safe and 
healthy learning environment, physical and intellectual competence, social and 
emotional development, relationships with families, program management, and 
professionalism. The course standards parallel the expectations and 
documentation required for Child Development Associate (CDA) credentialing. 
These include rigorous levels of self-critique and reflection; performance 
assessments by instructors, parents, and other professionals; comprehensive 
assessment of knowledge through a standardized exam; and other professional 
documentation. Second year students who meet requirements will participate in an 
extended internship experience during the second semester. Students must 
provide their own transportation to the internship site. This program prepares 
students for employment in early childhood education and related services and 
provides the foundations for study in higher education that leads to early childhood 
education, and other child-related careers. Required Prerequisite: Early Childhood 
Education I. Two semesters, three credits per semester, 11-12th grade. Counts as 
a Directed Elective or Elective for all diplomas. Qualifies as a CTE concentrator 
course for the Early Childhood Education Pathway.

HEALTH SCIENCE PATHWAYS – COURSE SEQUENCE 2019-2020

<table>
<thead>
<tr>
<th>Health Science – Nursing Pathway</th>
<th>Dental Careers Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year:</strong></td>
<td></td>
</tr>
<tr>
<td>1st Sem: Health Science I (3 CR)</td>
<td>1st Sem: Dental Careers I (3 CR)</td>
</tr>
<tr>
<td>2nd Sem: Health Science II (3 CR)</td>
<td>2nd Sem: Dental Careers I (3 CR)</td>
</tr>
<tr>
<td><strong>Second Year:</strong></td>
<td></td>
</tr>
<tr>
<td>1st Sem: Health Science II – Special Topics (3 CR)</td>
<td>1st Sem: Health Science II – Special Topics (3 CR)</td>
</tr>
</tbody>
</table>

5203 Dental Careers I (2020-2021 One year course/one semester)
Dental Careers I prepares the student for an entry-level dental assisting position. 
Emphasis is placed on the clinical environment, chair-side assisting, 
equipment/instrument identification, tray set-ups, sterilization, and characteristics of 
microorganisms and disease control. In addition, oral, head and neck anatomy, 
biological embryology, histology, tooth morphology, charting dental surfaces, and 
ilness are all introduced. Simulated in-school laboratory experiences are also 
cluded to provide opportunities for students to further develop clinical skills and 
the appropriate ethical behavior. Students are required to have uniforms (scrubs), 
white shoes, and other supplies. Two semester course, 3 credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Dental Careers Pathway.
5204 Dental Careers II  (2020-2021 One year course/one semester)
Students in Dental II prepare for the clinical practicum experience by advancing their knowledge of infection control, oral anatomy, first aid and CPR, dental charting procedures, and four-handed dentistry skills required to be successful as a Dental Assistant. Dental office management procedures and professional ethics are reviewed and practiced. This program introduces students to standards and skills required to pass the Dental Association National Board (DANB) Certification test for Dental Assisting. Students are required to have uniforms (scrubs), white shoes, and other supplies. Students who meet the requirements will participate in a clinical experience in a dentist’s office. Students must pass a TB test before they are allowed to participate in the clinical internship. Two semester course, 3 credits per semester, 11-12th grades. Students who meet requirements may also earn dual credits. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Dental Careers Pathway.

5282 Health Science I Nursing
Health Science Education I is a course designed to provide students with an introduction to health careers. Students will also receive an introduction to healthcare systems, anatomy, physiology, and medical terminology. Simulated in-school laboratory experiences are also included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior. Students are required to have special uniforms, shoes, and identification name tag. One semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course for the Health Science – Nursing pathway.

5284 Health Science II Nursing
The curriculum includes instruction in first aid, CPR, basic anatomy and physiology, vital signs, medical terminology, medical filing, and medical abbreviations. The major focus of the course is preparing students for the Indiana State Certified Nursing Assistant (CNA) certification, which requires completion of a written examination and practical skills test given at the end of the school year. The CNA state training course requires that the student complete, at a minimum, a 75-hour, non-paid, clinical internship in a long-term care facility. All students must have a physical examination, TB test, and drug screen before they can participate in the internship. Students are required to have special uniforms, shoes, and a name tag suitable for work in the health care facilities where they will receive their clinical experience. Students must provide their own transportation. One semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course for the Health Science – Nursing pathway.

5286 Health Science II: Special Topics
First semester, students will earn three credits in Health Science II: Special Topics. Second semester, students will earn two credits in Anatomy/Physiology and one credit in Medical Terminology as preparation for postsecondary health care programs. Students must have earned credit in Health Sciences I/II or Dental
Careers I/II to be admitted to this program. **Health Careers II: Special Topics** provides students interested in the dental or health care field the opportunity to further expand their knowledge, skills, and attitudes through the study of anatomy and physiology and a long-term clinical experience. This course will be a combination of classroom, laboratory, and clinical experience. An important part of any career in the health/dental field is an understanding of anatomy and physiology. Students will study homeostasis and the essentials of human function at the level of genes, cells, tissues, and organ systems. A second strand of the course is an extended laboratory experience designed to provide students the opportunity to assume the role of a health care provider and practice technical skills, previously learned in the classroom, at the clinical site. Students will renew their first aid/CPR certification. Students are required to have uniforms (scrubs), white shoes, and other supplies. Students must also have a TB test and physical examination before they are allowed to participate in the clinical internship. **One semester course, three credits per semester, 11-12th grades. Counts as a Directed Elective and Elective for all diplomas.**

5276 **Anatomy and Physiology I** (Taken in coordination with Medical Terminology)

Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, skeleton, muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health related fields. **One semester, two credits, grades 11-12th. Counts as a Directed Elective or Elective for all diplomas and fulfills a Core 40 Science course requirement for all diplomas.**

5274 **Medical Terminology I** (Taken in coordination with Anatomy and Physiology)

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols. **One semester, one credit, grades 11-12th. Counts as a Directed Elective or Elective for all diplomas.**

5610 **Industrial Automation and Robotics 1-1 – First Year Program**

5610 **Industrial Automation and Robotics 1-2**

This course introduces students to design and programming concepts in basic robots that use sensors and actuators to solve specific problems and complete specific tasks. This will include introductory programming autonomous mode. Students will also learn to program a humanoid robot, tethered and in autonomous
mode, able to react to specific circumstances and perform human-like tasks when programming is complete. This course will provide fundamentals in industrial robotics basic programming and operations. Students will program an industrial robot through explanation of a teach pendant and use proper programming commands with hands-on utilization of an industrial robot. This course will provide fundamental knowledge and skills in basic lasers, pneumatics, hydraulics, mechanics, basic electronics, and programmable logic controllers along with an understanding of career pathways in this sector. **Two semester course, 3 credits per semester, 11-12th grades. Program is taught on Ivy Tech Muncie Campus and student can earn related college credits. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Robotics Pathway.**

**5612 Industrial Automation and Robotics 2-1 – Second Year Program**

**5612 Industrial Automation and Robotics 2-2**

Industrial Automation and Robotics II, focuses on industrial robots, programming PLC’s, automating cells, advanced programming, and designing/building task-oriented robots. Students will engage in active learning, critical thinking, and problem solving through advanced robotic procedures and processes. Students will learn industrial robotic programming languages, as well as strategies for improving efficiency through automation. Students will study basic computer numerical controlled (CNC) machining and will combine automation and CNC machining to perform common industrial tasks. They will also apply knowledge to real world situations to create working solutions. **Required Pre-requisite: Industrial Automation and Robotics 1. Two semester course, three credits per semester, 11-12th grades. Program is taught on Ivy Tech Muncie Campus and student can earn related college credits. Counts as a Directed Elective and Elective for all diplomas and as a quantitative reasoning course. Qualifies as a CTE Concentrator course in the Robotics Pathway.**

**PUBLIC SAFETY PROGRAM**

Students in this program are introduced to the skills that are commonly used by entry-level employees in public safety positions. This one-year course is divided in two semesters: **Criminal Justice and Fire and Rescue.** The focus of the course is to provide students exposure to the numerous career opportunities in the areas of public safety, such as Fire Fighter, Police Officer, 911 dispatchers, EMTs, Corrections Officers, and other emergency response career options. **Note: For the 2020-2021 school year, these course will become individual, year-long CTE Pathway programs.**

**5822 Criminal Justice I**

This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Instruction includes police patrol procedures, dealing with misdemeanors, felonies, traffic violations, and accidents; investigative and evidence collection procedures; making arrests; and testifying in court. Oral and written communication skills are reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. One semester, three credits, 11-12th grades, part of the year-long Public Safety program. **Counts as a Directed Elective and Elective for all diplomas**
5824 Criminal Justice II  (2020-2021 One year course/one semester)
This course introduces students to concepts and practices in traffic control as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activities and chain of custody procedures will also be reviewed. Current trends in criminal justice and law enforcement will also be covered. One semester course, 3 credits per semester, 11-12th grade. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Criminal Justice Pathway.

5820 Fire and Rescue I
The fire science component taught in the alternate semester includes instruction in the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment such as extinguishers, pumps, hoses, ropes, ladders, gas masks, hydrants, standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage practices and equipment; fire and arson investigation; and inspection techniques. Students will also be introduced to the First Responder Medical Certificate that is needed for all of the public safety professions. One semester, three credits, 11-12th grades, part of the year-long Public Safety program. Counts as a Directed Elective and Elective for all diplomas

5826 Fire and Rescue II  (2020-2021 One year course/one semester)
This course builds on the skills learned in the previous class but with a greater focus on Emergency Medical Services. In addition to a focus on Firefighter II, Hazardous Materials Awareness, and Hazardous Materials Operations, students will be introduced to the theories, techniques, and operational aspects of pre-hospital emergency care, within the scope and responsibility of the basic emergency medical technician. Students will learn to recognize the seriousness of the patient’s condition, use the appropriate emergency care techniques and equipment to stabilize the patient, and safely transport them to the hospital. Opportunities for laboratory practice with local ambulance services are also included to provide occasions for students to further develop clinical skills and the appropriate ethical behavior. One semester course, 3 credits per semester, 11-12th grade. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Fire and Rescue Pathway.
5776 Welding Technology I-1 First-Year Program  
5776 Welding Technology I-2  
Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. *Two semester course, 3 credits per semester, 11-12th grades. Program is taught on Ivy Tech Muncie Campus and student can earn related college credits. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Welding Pathway.*

5778 Welding Technology II-1 Second-Year Program  
5778 Welding Technology II-2  
Welding Technology II builds on the skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. *Required Pre-requisite: Welding Technology I. Two semester course, 3 credits per semester, 11-12th grades. Program is taught on Ivy Tech Muncie Campus and student can earn related college credits. Counts as a Directed Elective and Elective for all diplomas. Qualifies as a CTE Concentrator course in the Welding Pathway.*
PHYSICAL EDUCATION

MCJROTC/ASPE
(Marine Corps Junior Reserve Officer Training Corps/
Alternative Supervised Physical Education)

Students may earn 1 of their required PE credits by completing 1 year of MCJROTC with a passing grade.

- The ASPE credit for MCJROTC will only count as a PE credit and does not count as an elective credit for MCJROTC. Students cannot earn the PE credit for being enrolled in a single MCJROTC course.
- Students will meet the remaining PE requirement by taking a semester of PE.

3542 Physical Education I 1(L)
This course emphasizes health-related fitness and developing the skills and habits necessary for a lifetime of activity. It includes skill development and the application of rules and strategies of complex difficulty in at least three of the following different movement forms: health-related fitness activities (cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition), aerobic exercise, team sports, individual and dual sports, outdoor pursuits, aquatics, dance, and recreational games. One semester, one credit, 9-12th grade, required. Fulfills part of the Physical Education requirement for the Core 40, AHD, THD, and General Diploma.

3544 Physical Education II (L) / Fit 100 Ivy Tech
This course emphasizes a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. It provides students with opportunities to achieve and maintain a health-enhancing level of physical fitness and increases their knowledge of fitness concepts. This course includes at least three different movement forms without repeating those offered in Physical Education I. Movement forms may include health-related fitness activities (cardiorespiratory endurance, muscular strength and endurance, flexibility, and body composition), aerobic exercise, team sports, individual and dual sports, gymnastics, outdoor pursuits, self-defense, aquatics, dance, and recreational games. One semester, one credit, 9 – 12th grades, required. Fulfills part of the Physical Education requirement for the Core 40, AHD, THD, and General Diploma.

3506 Health & Wellness Education/Fit 100 Ivy Tech
This is a required course designed to further acquaint each person with a better understanding of oneself and the environment. Included are units of study on body systems and their functions, diseases, mental health, personal hygiene, nutrition, chemical abuse, community health, first aid, and safety. Resource persons from the community and various health agencies contribute to the instructional program. One semester, one credit, 9-12th grades. Fulfills the Health requirement for the Core 40, AHD, THD, and General Diploma.

77
3560 Elective Physical Education/Leisure Sports (L)
Skill development and rules of selected activities from the following: badminton, bowling, Frisbee, golf, handball, pickle ball, running, swimming, table tennis, tennis, and volleyball. Various recreational team, individual, and dual sports are included. Physical Education I and II are required before enrolling in elective physical education courses. One semester, one credit, 10-12th grades.

3560 Elective Physical Education /Physical Conditioning 1 (L)  
3560 Elective Physical Education/Physical Conditioning 2 (L)
This course includes beginning instruction in the development of one’s physical capabilities, introduction to the use of the Universal Machine, and basic techniques of free weight lifts. Information is discussed as to physiological reasons for muscle growth, and the adverse effects of drugs involved in muscle gain are studied.

A basic weight lifting program is set up for each individual according to his/her ability and is incorporated along with aerobic activities to develop cardiovascular fitness. Testing is done periodically to assess levels of growth. Physical Education I and II are required before enrolling in elective physical education courses. One semester each, one credit each, 10-12th grades, repeatable.
BIOLOGICAL SCIENCE COURSES

**3024 Honors Biology I-1 (L)**
**3024 Honors Biology I-2 (L)**

Students must qualify for the Honors Program to enroll in this class. This course will provide students with expanded opportunities to perform laboratory, literature, and field investigations focused on cell biology, genetics, evolution, and ecology. Laboratory experience will comprise 50% of the course, and each student will complete a long-term inquiry project. Students should be able to:

- Recognize the relationship of biochemistry, photosynthesis, respiration, and cell reproduction to the function of the cell.
- Demonstrate an understanding of Mendelian inheritance, DNA structure and function, and perform basic DNA analysis.
- Objectively examine the basic theories of evolution.
- Assess the various components of the environment and establish an opinion on current environmental issues.

Two semesters, two credits, (one credit per semester) 9th grade, elective. *Fulfills the Biology requirement for the Core 40, AHD, THD, and General Diploma.*

**3024 Biology I-1 (L)**
**3024 Biology I-2 (L)**

Biology I will provide, through regular laboratory and field investigations, a study of the structures and functions of living organisms and their interactions with their environment. At a minimum, this study will explore the functions and processes of cells, tissues, organs, and systems within various species of living organisms and the roles and interdependencies of organisms within populations, communities, ecosystems, and the biosphere. Students should have an opportunity to gain an understanding of the uses of biology in various careers and to cope with biological questions and problems related to personal needs and social issues. Laboratory experience will comprise 25% of the course. Two semesters, two credits, (one credit per semester) 9-12th grades, required. *Fulfills the Biology requirement for the Core 40, AHD, THD, and General Diploma.*

**3030 Life Science (L)**

Life science will provide a basic biology course designed to provide students with opportunities to perform laboratory and field investigations of those biological concepts and principles which affect their well-being, as well as that of their community and other living organisms in their environment. The course will develop those problem resolution skills and strategies that students will need to be effective citizens, consumers, and workers in a scientific and technological society. One semester, one credit, 9-12th grades, elective. *Fulfills a Science requirement for the General Diploma only or counts as an Elective for the Core 40, AHD, and THD.*
3026 Biology II 1 (L)/BIO 101 Ivy Tech
3026 Biology II 2 (L)/BIO 101 Ivy Tech
Pre-requisite: Biology I. This course provides students with extended opportunities to pursue laboratory (25% of the classroom experience), field, and literature investigations into the internal structures, functions, and processes of living organisms and the environmental interactions of these organisms. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course.

3020 AP Biology 1 (L)
3020 AP Biology 2 (L)
Pre-requisite: Biology I plus two additional Core 40 science credits (preferably chemistry). This course follows College Board entrance examination guidelines for advanced placement biology. This course will provide students with the opportunities to pursue laboratory, field and literature investigations into the internal structures, functions and processes of living organisms and the environmental interactions of these organisms. Coverage of the three general areas: molecules and cells; genetics and evolution; and organisms and populations will stress basic facts and the synthesis of these facts into major concepts and themes. This course is for students preparing for the AP Exam in biology. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course A Quantitative Reasoning course.

3092 Botany 1 (L)
3092 Botany 2 (L)
Pre-requisite: Biology I. This course will provide students with opportunities to perform laboratory, literature, and field investigation of various species of plants, the systems and subsystems of plants, their interactions with other organisms and their environments, as well as to study the similarities to and differences from organisms in other biological kingdoms. Students will be expected to study the internal structures, functions, and processes of various species of plants, as well as the ways these species interact with the environment. The course will involve students in more specialized hands-on investigations of the taxonomy, morphology, and/or history of plants, and refine the students’ ability to conduct scientific inquiry/methodology. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course.

3092 Genetics (L)
Pre-requisite: Biology I. In this course students will utilize a laboratory setting (25% of class experience) to examine human inheritance and molecular genetics. As part of the investigative nature of this course, students will:
- Recognize modes of transmission and detail the biochemical pathways of genetic diseases.
- Examine the genetic blueprint and perform DNA analysis.
- Recognize the impact of the environment on the human genome.
- Distinguish between different types of gene technology and perform selected experiments to demonstrate the process.
- Analyze current trends and technology in the field of genetics and evaluate the bioethics of these societal issues. One semester, one credit, 11-12th grades, elective. A Core 40, AHD, and THD course.
**3092 Human Physiology (L)**
Pre-requisite: Biology I. This course focuses on the functional mechanisms of the human body in maintaining homeostasis. Complementarity of structure and function is stressed and the interrelationships of body organ systems are addressed. Laboratory investigations (25% of class experience) include analysis of specific body functions using lab equipment and computer software. Students should be able to:
- Relate structure to the function of each system of the human body.
- Demonstrate a comprehensive understanding of each system of the human body.
- Recognize the importance of homeostasis in maintaining the human body.
- Analyze data and predict outcomes of selected body functions.
One semester, one credit, 11-12th grades, elective. A Core 40, AHD, and THD course.

**3092 Zoology 1 (L)**
**3092 Zoology 2 (L)**
Pre-requisite: Biology I. This course will provide for investigations of the various phyla of animals, their systems and subsystems, their interactions with other organisms and their environment, and their biological kingdoms. The course will provide laboratory investigation (comprising 25% of the class experience) of preserved specimens for the study of animal taxonomy, morphology, and/or histology. When living or preserved specimens are not available, media records of the animal structures, behaviors, and ecological functions will be utilized. The course will involve students in more specialized hands-on investigations of the taxonomy, morphology, and/or history of the animal taxonomy and refine the students’ ability to conduct scientific inquiry/methodology. Students will be expected to apply biological concepts and principles to specific environmental and health issues. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course.

**EARTH/SPACE SCIENCE COURSES**

**3044 Earth and Space Science I-1 (L)**
**3044 Earth and Space Science I-2 (L)**
This course should provide a study of the earth’s lithosphere, atmosphere, and hydrosphere and its celestial environment. Laboratory investigations will comprise 25% of the class experience and emphasize the study of the energy at work in forming and modifying earth materials, landforms, and continents through geological time. Students should have opportunities to gain an understanding of the history of the development of the earth/space sciences, to explore the uses of knowledge of the earth and its environment in various careers, and to cope with problems related to personal needs and social issues. Two semesters, two credits, 9-12th grades, elective. A Core 40, AHD, and THD course.
3092 Astronomy (L)
Pre-requisite: One year of Earth and Space Science and Algebra I. This course is a study of the universe—its composition, structure, apparent motions, and characteristics. This course will investigate how man’s understanding of the universe is changing. Techniques of measurement in astronomy will be included in laboratory investigations, which comprise 25% of the classroom experience. Use of the planetarium will be an integral part of this course. One semester course, one credit, 11-12th grades, elective. A Core 40, AHD, and THD course.

PHYSICAL SCIENCE COURSES

3064 Chemistry I-1 (L)/ CHEM 101 Ivy Tech
3064 Chemistry I-2 (L)/ CHEM 101 Ivy Tech
Students must qualify for the Honors Program to enroll in this class. This course will provide students with expanded opportunities to perform laboratory, literature, and field investigations focused on the study of the structure of matter and the mechanisms of interactions of matter and chemical reactions. Laboratory experience will comprise 50% of the course, and a long-term inquiry project will utilize information from investigations students are making. Students will have opportunities to prepare laboratory solutions of known concentration, titrate to find unknown concentrations, calculate pH, pOH, kw, ka, kb, molarity, molality, moles, grams, volume, and number of particles. At the completion of the course, students should be able to calculate models of physical quantities, perform lab investigations independently, write formal lab reports, perform extended research, document sources, solve problems individually and in groups, and be able to explain and relate chemistry concepts to activities, individuals, and situations outside the classroom. Two semesters, two credits, 10-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.

3064 Chemistry I-1 (L)
3064 Chemistry I-2 (L)
Pre-requisite: Algebra I. With an environmental emphasis and an emphasis on practical daily usage, this course will allow students to synthesize useful models of the structure of matter and the mechanisms of its interactions through laboratory investigations (25% of class work) of matter and its chemical reactions. This course is organized around the concepts of atomic structure, bonding, the quantitative study of chemical reactions and other changes that accompany chemical reactions. Students should have the opportunity to gain an understanding of the history of chemistry, to explore the uses of chemistry in various careers, to cope with chemical questions and problems related to personal needs and social issues, and to learn and practice laboratory safety. Two semesters, two credits, 10-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.
3060 AP Chemistry I-1 (L)  
3060 AP Chemistry I-2 (L)  
Pre-requisite: Chemistry I. Advanced Placement Chemistry is for students preparing for the AP Exam in chemistry. This course follows College Board entrance examination guidelines for advanced placement chemistry. The emphasis of instruction will be on the development of a comprehensive understanding and preparation in chemistry concepts using mathematical formulations, chemical calculations, and extended laboratory work. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.

3066 Chemistry II-1 (L)  
3066 Chemistry II-2 (L)  
Pre-requisite: Chemistry I. This course will provide for extended laboratory (at least 25% of the classroom experience), and literature investigations of chemical reactions of matter in living and non-living materials. The course will stress the unifying themes of chemistry, the development of useful physical and mathematical models of matter and its interactions, and the methods of scientific inquiry. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.

3084 Physics I-1 (L)  
3084 Physics I-2 (L)  
Pre-requisite: Algebra I and Geometry 1 & 2. This course will aid students in synthesizing concepts of matter and energy through the laboratory study of mechanics, wave motion, heat, light, electricity, magnetism, electromagnetism, and atomic and nuclear physics. Labs will comprise at least 25% of class work. Students will have opportunities to acquire an awareness of the history of physics and its role in the development of scientific theories and laws. Students will also have opportunities to become better able to cope with physics questions and problems related to personal needs, social issues, and various careers. Two semesters, two credits, 11-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.

3080 AP Physics, I-1: Algebra-based (L)  
3080 AP Physics, I-2: Algebra-based (L)  
Pre-requisite: Algebra II or concurrently enrolled in Algebra II. Advanced Placement Physics I is for students preparing for the AP Exam in AP Physics I. This course follows College Board entrance examination guidelines for AP Physics I. This course is equivalent to a first semester college course in algebra-based physics. The course covers Newtonian mechanics; work, energy, and power; and mechanical waves and sound. It also introduces electrical circuits. Two semesters, two credits, 10-12th grades, elective. A Core 40, AHD, and THD course. A Quantitative Reasoning course.
3081 AP Physics, II-1: Algebra-based (L)
3081 AP Physics, II-2: Algebra-based (L)
Pre-requisite: AP Physics I.
Advanced Placement Physics II is for students preparing for the AP Exam in AP Physics II. This course follows College Board entrance examination guidelines for AP Physics II. This course is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. Two semesters, two credits, 11-12th grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course*

INTEGRATED SCIENCE COURSES

3110 Environmental Science, 1 (L)
3110 Environmental Science, 2 (L)
Pre-requisite: Two years of Core 40 Science courses/credits. This course will deal with the environmental issues of water ecology, air and water pollution, energy management, wildlife management, solid waste management, recycling and the environmental impact of pollution and other human activities on natural ecosystems. Students will formulate, design and carry out laboratory and field investigations as an essential course component. (At least 25% of class work is laboratory experience.) Two semesters, two credits, 11-12th grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course*.

3108 Integrated Chemistry-Physics 1 (L)
3108 Integrated Chemistry-Physics 2 (L)
Pre-requisite: Algebra I and one year of Core 40 Science. This course will introduce the fundamental concepts of scientific inquiry, the structure of matter, chemical reactions, forces, motion, and the interactions between energy and matter. The course will serve students as a laboratory-based (at least 25% of class work) introduction to possible future course work in chemistry or physics while ensuring a mastery of the basics of each discipline. The ultimate goal of the course is to produce scientifically literate citizens capable of using their knowledge of physical science to solve real-world problems and to make personal, social and ethical decisions that have consequences beyond the classroom walls. It is not open to students who have completed regular chemistry and/or physics. Two semesters, two credits, 10-12th grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course.*
3012 AP Environmental Science

AP Environmental Science is a course based on content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. Students enrolled in AP Environmental Science investigate the scientific principles, concepts, and methodologies required to understand the interrelationships of
the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them.

- Recommended Grade Level: 12
- Recommended Prerequisite: Biology and Chemistry
- Credits: 2 semester course, 1 credit per semester
- Counts as a Science Course for all diplomas
- Qualifies as a quantitative reasoning course
SOCIAL STUDIES

1570 Geography and History of the World 1
1570 Geography and History of the World 2
1570 H Geography/ and History of the World 1
1570 H Geography/ and History of the World 2
This course is designed to enable students to use geographical skills and historical concepts to deepen their understanding of major global themes including the origin and spread of world religions, exploration, conquest, imperialism, urbanization, innovations and revolutions. Two semesters, one credit each, 9-12th grades. Fulfills a Social Studies requirement for the Core 40, AHD, THD, and General Diploma or counts as an elective for any diploma.

1548 World History and Civilization 1
1548 World History and Civilization 2
This course emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced people and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Two semesters each, one credit each, 9-12th grades, elective. Fulfills a Social Studies requirement for the Core 40, AHD, THD, and General Diploma or counts as an elective for any diploma.

1576 AP World History 1
1576 AP World History 2
AP World History is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP World History focuses on developing students’ abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance – focusing on the environment, cultures, state-building, economic systems, and social structures – provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. Recommended Grade Level: none; Recommended Prerequisites: none; Students should be able to read a college level textbook and write grammatically correct, complete sentences; Credits: 2 semester course, 1 credit per semester; Fulfills a Social Studies requirement for all diplomas.
**1542 U.S. History 1**  
1542 U.S. History 2  
1542 U.S. History 1/ HIST 101 Ivy Tech  
1542 U.S. History 2/ HIST 102 Ivy Tech  
This course emphasizes national development in the late nineteenth and twentieth centuries that should build upon concepts developed in previous studies of American history. In this course, students will be given the opportunity to identify and review significant events and movements in the early development of the nation. Students will gain an understanding of the interaction of historical events to geographic, social, and economic influences on national development in the later nineteenth and the twentieth centuries. A topical, chronological, or comparative approach can be used in developing certain themes from America’s past as they relate to life in Indiana and the United States today. Two semesters, one credit each, 11-12th grades, required. *Fulfills the U.S. History requirement of the Core 40, AHD, THD, and General Diploma.*

**1562 AP U.S. History 1**  
1562 AP U.S. History 2  
AP U.S. History topics will be drawn from the period of 1492-present and adhere to the Advanced Placement curriculum outlined by the College Board. The program is designed to provide students with analytical skills and factual knowledge necessary to deal with the problems and materials in United States history. Students will learn to assess historical materials such as primary sources including documentary materials and maps, statistical tables, and pictorial and graphic evidence of historical events. This program prepares students for intermediate and advanced college courses. Students will be expected to take the AP exam upon completion of the course. Two semesters, two credits, 11-12th grades. *Fulfills the U.S. History requirement of the Core 40, AHD, THD, and General Diploma.*

**1540 U.S. Government**  
1540 Government/POLS 101 Ivy Tech  
United States Government will provide a framework for understanding the nature and the importance of responsible civic participation and for learning the rights and responsibilities of individuals in a constitutional democracy. The course will enable students to explore the historic origins and evolution of political philosophies into contemporary political and legal systems. Constitutional structure and the processes of the legislative, executive and judicial branches of the national, state and local levels of government will be examined. Students should draw conclusions about the impact and interrelationships of history, geography and economics upon our system of government. They should also be able to demonstrate an understanding of the governmental structures of the United States and other political systems as well as the relationship of American government in world affairs. The study of United States government will offer students opportunities to develop knowledge, inquiry skills, and the means to preserve and improve our constitutional democracy. One semester, one credit, 11-12th grades, required. *Fulfills the U.S. Government requirement of the Core 40, AHD, THD, and General Diploma.*
1560 AP Government and Politics: United States 1
1560 AP Government and Politics: United States 2

This course is the in-depth study of United States government as well as governments of the United Kingdom, Mexico, Nigeria, Iran, Russia, and China. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples. This course also introduces students to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. Students will be expected to take the AP exam upon completion of the course. Advanced Placement U.S. Government is a two semester, two credit course, 11-12th grades. Fulfills the U.S. Government requirement of the Core 40, AHD, THD, and General Diploma.

1514 Economics

Economics will include a study of the allocation of scarce resources and their alternative uses for satisfying human needs. This course will examine basic models of decision-making at various levels and in different areas including decisions made as a consumer, producer, saver, investor, and voter. It will also examine business decisions to maximize profits, and public policy decisions in specific markets dealing with output, employment, and prices in the national economy. One semester, one credit, 11-12th grades. Fulfills the Economics requirement of the Core 40, AHD, THD, and General Diploma or counts as a Social Studies elective for any diploma. A Quantitative Reasoning course.

1566 AP Microeconomics 1
1564 AP Macroeconomics 2

The Advanced Placement Economics course adheres to the Advanced Placement curriculum as outlined by the College Board. This is a course that provides students with a learning experience equivalent to that obtained in a typical college introductory microeconomics or macroeconomics course. Two semesters, one credit per semester, 11-12th grades. Fulfills the Economics requirement of the Core 40 AHD, THD, and General Diploma.

First Semester – Microeconomics: The study of microeconomics leads students to understand that in any economy the existence of limited resources along with unlimited wants results in the need to make choices. Opportunity costs and tradeoffs are studied and illustrations provided. The ways that different types of economies determine which goods and services to produce, how to produce them, and to whom to distribute them are explored. Students will also learn why and how specialization and exchange increase the total output of goods and services and hence, determine the basis under which mutually advantageous trade can take place between countries. Students are required to take the AP Exam at the conclusion of the semester. A Quantitative Reasoning course.

Second Semester-Macroeconomics: This course will focus on macroeconomics, an understanding of the principles of economics that apply to an economic system as a whole. This course will emphasize the following: the performance of the economy
as a whole as measured by trends in gross national product, gross domestic product, inflation, and unemployment. Students will be expected to take the AP exam upon completion of the course. A Quantitative Reasoning course.

1528 Modern World Civilization
This course provides an in-depth look at the twentieth century world. Students will study different cultures as they exist in the world today and make a comparative analysis of the various kinds of governmental, economic, and social systems. International relationships will be examined partly from the viewpoint of national interests, including the successes or failures of diplomacy. One semester, one credit, 11-12th grades, elective. Fulfills an elective for the Core 40, AHD, THD, and General Diploma.

1532 Psychology
1532 Psychology/ PSYCH 101 Ivy Tech
The course will provide an opportunity to study individual and social psychology and how the knowledge and methods of psychologists are applied to the solution of human problems. Content for the course should include some insights into behavior patterns and adjustments to social environments. The course will develop critical attitudes toward superficial generalizations about human behavior, respect for the difficulty of establishing the truth of a proposition, and a heightened sensitivity to the feelings and needs of others. One semester, one credit, 10-12th grades, elective. Fulfills an elective for the Core 40, AHD, THD, and General Diploma.

1558 AP Psychology 1
1558 AP Psychology 2
The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. The aim of the course is to provide a learning experience equivalent to the challenges of an introductory psychology college course. Students will be required to take the AP Psychology Exam at the conclusion of the course. Two-semester, two credits, 11-12th grades elective. Fulfills an elective for the Core 40, AHD, THD, and General Diploma.

1516 Ethnic Studies
Ethnic Studies provides opportunities to broaden students’ perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigrations, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States. Recommended Grade Level: none; Recommended Prerequisites: none; Credits: 1 semester course, 1 credit; Fulfills an elective for the Core 40, AHD, THD, and General Diploma.
Indiana Studies

Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and student will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions. One Semester course, one credit per semester. Counts as an Elective for all diplomas. Must be offered at least once per school year.

Sociology

Sociology will provide an opportunity for students to study group behavior and basic human institutions. Broad areas of content will include the study of institutions found in all societies. These institutions include the family, religions, community organizations, political and social groups, and leisure time organizations. Mores, values, traditions, folkways, the mobility of people, and other factors in society that influence group behavior will be included in the study. One semester, one credit, 11-12th grades, elective. Fulfills an elective for the Core 40, AHD, THD, and General Diploma.

Topics in History I

Topics in History 2

Topics in History provides students the opportunity to study specific historical eras, events, or concepts. Development of historical research skills using primary and secondary sources is emphasized. The course focuses on one or more topics or themes related to United States or world history. Examples of topics might include: (1) twentieth-century conflict, (2) the American West, (3) the history of the United States Constitution, and (4) democracy in history. Recommended Grade Level: 11, 12; Recommended Prerequisites: United States History or History and World Civilizations; Credits: 1 semester course, 1 credit per semester. This course may be repeated if the material in the course is different from one semester to the next. Topics in History can address different topics in World History or U.S. History; Fulfills an elective for the Core 40, AHD, THD, and General Diploma.
WORK BASED LEARNING EXPERIENCES

Work Based Learning (WBL) means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction.

5974 Work Based Learning 1
5974 Work Based Learning 2

Work Based Learning is a stand-alone course that prepares students for college and career. This strategy builds students’ skills and knowledge in their chosen career path. Work Based Learning experiences occur in workplaces (paid experience) and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Students have the opportunity to apply the concepts, skills, and dispositions learned in their pathways in real-world business and industry settings. Therefore, at least four credits in a student’s pathway would be prerequisite to the student enrolling in the stand-alone WBL course. Work Based experiences need to be in an industry setting closely related to a student’s CTE pathway. Two semester course, three credits per semester, 12th grade. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a method for demonstrating Employability Skills.

0530 Career Exploration Internship 1 (Multi-Disciplinary Course)
0530 Career Exploration Internship 2

The Career Exploration Internship course is an unpaid work experience in the public or private sector that provides for workplace learning in an area of student career interest. Unlike a Work Based Learning experience in which students gain expertise in a specific occupation, the career exploration internship is intended to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of work sites or departments. In addition to their workplace learning activities, students participate in 1) regularly scheduled meetings with their classroom teacher, or 2) a regularly scheduled seminar with the teacher for the purpose of helping students make the connection between academic learning and their work-related experiences. A clear internship agreement and training plan is developed by the student, teacher, and internship site mentor/supervisor to guide the student’s career exploration experience. One semester course, one to three credits per semester, can be taken for multiple semesters, 12th grade. Counts as a Directed Elective or Elective for all diplomas. Qualifies as a method for demonstrating Employability Skills.
WORLD LANGUAGES

2080 Latin I-1 & 2
2120 Spanish I-1 & 2
2060 Japanese I-1 & 2
Level I students will develop listening, speaking, writing, and reading skills through interesting topics. They are provided opportunities to respond orally to directions and commands, understand and use appropriate forms of address, ask and answer simple questions, read isolated words and short texts on simple topics, and understand brief written directions. Communication will focus on active, practical usage. Emphasis will be placed on communicative practice through comparison of target language and English, other disciplines, other cultures, and the global community. In Japanese, students will master two alphabets of characters. In Latin, students study the gods and heroes of classical mythology. Two semesters, one credit each, 9-12th grades, elective. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any Diploma.

2082 Latin II-1 & 2
2122 Spanish II-1 & 2
2062 Japanese II-1 & 2
Level II enables students to participate in classroom activities related to the target language as well as to participate in conversations dealing with daily activities and personal interests. They will respond orally to questions regarding routine activities, participate in conversations, relate a simple experience, understand main ideas and facts from reading, and write briefly on a given topic. This course provides students with opportunities to expand previous cultural knowledge. Two semesters, one credit each, 9-12th grades, elective. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.

2084 Latin III-1 & 2 / Latin 101 BSU
2124 Spanish III-1 & 2 / Spanish 101&102 Ivy Tech
2064 Japanese III-1 & 2
In addition to previously learned communicative skills, Level III students will reinforce and further their knowledge of other disciplines, demonstrate an understanding of cultural differences, and show evidence of self-expression in the language. They will read authentic materials and short literary selections and write brief compositions. Two semesters, one credit each, 9-12th grades, elective. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.
Level IV students will experience the target language by expressing and supporting reactions, judgments, and opinions. They will explore cultural products such as literary/historical selections and fine arts, in addition to practices common to the target language community. They will be able to respond to questions and create original works in both oral and written form in the target language. They will read longer, authentic materials and make judgments about their reading. In Latin, students will gain an understanding of Roman traditions, historical events, and major figures. Students taking French IV 1 & 2 AP, German IV 1&2 AP, or Spanish IV 1 & 2 AP will be required to take the AP exam. Two semesters, one credit each, 9-12th grades, elective. Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.
In partnership with

Ivy Tech Community College

*Graduate with a high school diploma AND

- A 2-year college degree
- OR
- One year of completed college

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<tr>
<th>Associates in Liberal Arts</th>
<th>Statewide Transfer General Education Core Competencies</th>
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<tr>
<td>Or Associates in Science</td>
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<tr>
<td>• At least 60 credit hours</td>
<td>• 30 credit hours</td>
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<tr>
<td>• Transfer to a four-year college</td>
<td>• Widely accepted at four-year colleges for transfer</td>
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- Receive broad exposure to a traditional Liberal Arts course of study, including art, English, literature, psychology, philosophy, music, sociology, history, social sciences, and laboratory sciences.

An Early College Student will...

- Complete homework – reviewing the difficult areas, prepare for quizzes/tests and review written papers.
- Seek assistance from the teacher and extra practice in those areas that they are having trouble understanding.
- Keep detailed records of assignments and upcoming quizzes/tests/papers
- Treat themselves, fellow students, instructors and staff with respect at all times Maintain an excellent attendance and discipline record for the remainder of high school.

IVY TECH COMMUNITY COLLEGE'S ASSOCIATE OF ARTS IN LIBERAL ARTS
The primary difference between the Associates in Science (AS) and the Associates in Liberal Arts (AA) is that for the AS, an EC student does not need foreign language credits. Instead, they must make up these credits through extra science, math and humanities courses.

<table>
<thead>
<tr>
<th><strong>Written Communication</strong></th>
<th>6 credits</th>
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<tr>
<td>ENGL 111 English Composition</td>
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<td>ENGL 112 Exposition and Persuasion</td>
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<tr>
<th><strong>Speaking and Listening</strong></th>
<th>3 credits</th>
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<tr>
<td>COMM 101 Fundamentals of Public Speaking</td>
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<th><strong>Quantitative Reasoning</strong></th>
<th>6-10 credits</th>
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<tr>
<td>MATH 136 College Algebra</td>
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<tr>
<td>MATH 137 Trig with Analytic Geometry</td>
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<td>MATH 211: Calculus I</td>
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<tr>
<th><strong>Scientific Ways of Knowing</strong></th>
<th>6-10 credits</th>
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<tr>
<td>BIOL 101 Introductory Biology</td>
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<td>CHEM 101 Introductory Chemistry I</td>
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<td>PHYS 101 AP Physics</td>
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<td>CHEM 105 AP Chemistry</td>
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<td>BIOL 105 AP Biology</td>
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<tr>
<th><strong>Social and Behavioral Ways of Knowing</strong></th>
<th>12 credits</th>
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<tr>
<td>HIST 101 Survey of American History I</td>
<td></td>
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<tr>
<td>HIST 102 Survey of American History II</td>
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<td>POLS 101 Intro to American Government and Politics</td>
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<td>PSYC 101 AP Psychology</td>
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<th><strong>Student Success Elective</strong></th>
<th>1 credit</th>
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</thead>
<tbody>
<tr>
<td>IVYT 111 First Year Seminar</td>
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<table>
<thead>
<tr>
<th><strong>Transfer Cluster Elective</strong></th>
<th>5 credits</th>
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<tbody>
<tr>
<td>CINS 101 Introduction to Microcomputers</td>
<td></td>
</tr>
<tr>
<td>FITN 100 Lifetime Fitness and Wellness</td>
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<table>
<thead>
<tr>
<th><strong>Foreign Language Elective</strong></th>
<th>8 credits</th>
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<tbody>
<tr>
<td>SPAN 101 Spanish Level I</td>
<td></td>
</tr>
<tr>
<td>SPAN 102 Spanish Level II</td>
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<tr>
<td>FREN 101 French Level I</td>
<td></td>
</tr>
<tr>
<td>FREN 102 French Level II</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th><strong>Liberal Arts Capstone Course</strong></th>
<th>1 credit</th>
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<tbody>
<tr>
<td>GENS 279 Liberal Arts Capstone Course</td>
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<table>
<thead>
<tr>
<th><strong>Humanistic and Artistic Ways of Knowing</strong></th>
<th>6 credits</th>
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<tbody>
<tr>
<td>SPAN 201 Spanish Level III</td>
<td></td>
</tr>
<tr>
<td>SPAN 202 Spanish Level IV</td>
<td></td>
</tr>
<tr>
<td>FREN 201 French Level III</td>
<td></td>
</tr>
<tr>
<td>FREN 202 French Level IV</td>
<td></td>
</tr>
<tr>
<td>ENGL 206 AP Literature</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL**  
At least 60 credits
Ivy Tech Community College’s Statewide Transfer General Education Core (STGEC) is incorporated into all transfer curriculums unless program accreditation requirements dictate a different selection of courses. Through its STGEC requirements, Ivy Tech ensures breadth and creates a greater coherence in each student’s overall education experience. The STGEC is designed to prepare students for successful transfer to the baccalaureate-degree granting institution of their choice. The STGEC was developed around Association of American Colleges & Universities' LEAP (Liberal Education and America’s Promise) Essential Learning Outcomes and supports all eight General Education Outcomes developed and approved by the Ivy Tech faculty. With few exceptions, courses selected are from Indiana’s Core Transfer Library.

<table>
<thead>
<tr>
<th>Category</th>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication</td>
<td>ENGL 111 English Composition</td>
<td>3 credits</td>
</tr>
<tr>
<td>Speaking and Listening</td>
<td>COMM 101 Fundamentals of Public Speaking</td>
<td>3 credits</td>
</tr>
<tr>
<td>Quantitative Reasoning</td>
<td>MATH 135 Finite Math</td>
<td>3 credits</td>
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<tr>
<td></td>
<td>MATH 136 College Algebra</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>MATH 137 Trig with Analytic Geometry</td>
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</tr>
<tr>
<td></td>
<td>MATH 211 Calculus</td>
<td>12 credits</td>
</tr>
<tr>
<td>Scientific Ways of Knowing</td>
<td>BIOL 101 Introductory Biology</td>
<td>3 credits</td>
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<tr>
<td></td>
<td>CHEM 101 Introductory Chemistry I</td>
<td>12 credits</td>
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<tr>
<td></td>
<td>BIOL AP Biology</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>CHEM AP Chemistry</td>
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</tr>
<tr>
<td>Social and Behavioral Ways of Knowing</td>
<td>ECON 201 Principles of Macro Economics</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>ECON 202 Principles of Micro Economics</td>
<td>12 credits</td>
</tr>
<tr>
<td></td>
<td>HIST 101 Survey of American History I</td>
<td>3 credits</td>
</tr>
<tr>
<td></td>
<td>HIST 102 Survey of American History II</td>
<td>12 credits</td>
</tr>
<tr>
<td></td>
<td>POLS 101 Introduction to American Government and Politics</td>
<td>3 credits</td>
</tr>
<tr>
<td>Humanistic and Artistic Ways of Knowing</td>
<td>FREN 101/102 French Level III</td>
<td>3 credits</td>
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<tr>
<td></td>
<td>SPAN 101/102 Spanish Level III</td>
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<tr>
<td></td>
<td>ENGL 206 AP Literature</td>
<td>3 credits</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>30 Credits</td>
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</table>
GRADUATION REQUIREMENTS

A High School Diploma is a certificate of graduation issued by the governing body of a school corporation certifying that the student has satisfied the minimum requirements for graduation from a high school of the corporation. Early College students may graduate with a Core 40 Diploma, Core 40 with Honors or Core 40 with Technical Honors. Core 40 is a high school curriculum that helps prepare students for college. It includes a series of academically challenging courses in English, mathematics, science, and social studies. A student also must complete directed electives selected from foreign language, art, computer technology, or a career area. Credit is awarded for appropriate achievement in a course for a semester in grades 9-12. The Core 40 with Academic Honors has the traditional Core 40 requirements as the base, with rigorous requirements above and beyond those required for the traditional Core 40 diploma. Core 40 with Technical Honors has the traditional Core 40 requirements as the base, with rigorous requirements in technical achievement above and beyond those required for the traditional Core 40 diploma.

To graduate with an Ivy Tech Community College degree or certificate, the student must:
1. Earn a High School Diploma
2. Attain a minimum grade point average of 2.00 in the required technical and general education courses
3. Successfully complete the required number of credits, with at least 15 of the total credits taken as a regular student of Ivy Tech, and not through test-out or other means of advanced placement
4. Satisfy all financial obligations due the College (Muncie Central Early College students are not charged tuition for any courses taught within the Muncie Central Early College program)
5. Satisfy program accreditation standards that may have additional requirements.

Each student entering the final semester prior to graduation must complete an Application for Graduation. This will be completed at the high school with the help of the Early College Coordinator.
<table>
<thead>
<tr>
<th>Advanced Placement Examination Title</th>
<th>Minimum Score</th>
<th>Ivy Tech Course</th>
<th>Credit Hours Awarded</th>
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<tbody>
<tr>
<td>Art History</td>
<td>3</td>
<td>ARTH 101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4,5</td>
<td>ARTH 101 and ARTH 102</td>
<td>6</td>
</tr>
<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 101</td>
<td>3</td>
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<tr>
<td></td>
<td>4</td>
<td>BIOL 105</td>
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<td></td>
<td>5</td>
<td>BIOL 105 and 107</td>
<td>10</td>
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<tr>
<td>Calculus AB</td>
<td>3, 4, 5</td>
<td>MATH 211</td>
<td>4</td>
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<tr>
<td>Calculus BC</td>
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<td>MATH 211</td>
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<tr>
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<td>4,5</td>
<td>MATH 211 and 212</td>
<td>8</td>
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<tr>
<td>Chemistry</td>
<td>3</td>
<td>CHEM 101</td>
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<tr>
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<td>4,5</td>
<td>CHEM 105 and 106</td>
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<td>Chinese Language and Culture</td>
<td>3, 4, 5</td>
<td>Foreign Language Elective</td>
<td>8</td>
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<td>Comparative Government and Politics</td>
<td>3, 4, 5</td>
<td>POLS 211</td>
<td>3</td>
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<tr>
<td>Computer Science A</td>
<td>3, 4, 5</td>
<td>CINS 136</td>
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<td>English Language and Composition</td>
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<td>ENGL 111</td>
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<td>4,5</td>
<td>ENGL 111, 112</td>
<td>6</td>
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<td>Environmental Science</td>
<td>3, 4, 5</td>
<td>BIOL 120</td>
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<td>European History</td>
<td>3, 4, 5</td>
<td>Humanities Elective</td>
<td>3</td>
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<tr>
<td>French Language</td>
<td>3, 4, 5</td>
<td>FREN 201, 202</td>
<td>8</td>
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<tr>
<td>French Literature</td>
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<td>Humanities Elective</td>
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<tr>
<td>German Language</td>
<td>3, 4, 5</td>
<td>Foreign Language Elective</td>
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<tr>
<td>Human Geography</td>
<td>3, 4, 5</td>
<td>Humanities Elective</td>
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<td>Italian Language and Culture</td>
<td>3, 4, 5</td>
<td>Foreign Language Elective</td>
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<tr>
<td>Japanese Language and Culture</td>
<td>3, 4, 5</td>
<td>Foreign Language Elective</td>
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<tr>
<td>Latin/Literature</td>
<td>3</td>
<td>Humanities Elective</td>
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<td>Latin/Vergil</td>
<td>3, 4, 5</td>
<td>Foreign Language Elective</td>
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<td>Macroeconomics</td>
<td>3, 4, 5</td>
<td>ECON 201</td>
<td>3</td>
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<td>Microeconomics</td>
<td>3, 4, 5</td>
<td>ECON 202</td>
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<td>Music Theory</td>
<td>3, 4, 5</td>
<td>HUMA 117</td>
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<td>Physics B</td>
<td>3</td>
<td>PHYS 101</td>
<td>4</td>
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<tr>
<td></td>
<td>4,5</td>
<td>PHYS 101 ad 102</td>
<td>8</td>
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<tr>
<td>Physics C/Electricity and Magnetism</td>
<td>3</td>
<td>PHYS 102</td>
<td>4</td>
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<td>4,5</td>
<td>PHYS 221</td>
<td>4</td>
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<tr>
<td>Physics C/Mechanics</td>
<td>3</td>
<td>PHYS 101</td>
<td>3</td>
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<tr>
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<td>4,5</td>
<td>PHYS 220</td>
<td>4</td>
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<tr>
<td>Psychology</td>
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<td>PSYC 101</td>
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<tr>
<td>Spanish Language</td>
<td>3, 4, 5</td>
<td>SPAN 201, 202</td>
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<tr>
<td>Spanish Literature</td>
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<td>SPAN 201, 202, 240</td>
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<tr>
<td>Statistics</td>
<td>3, 4, 5</td>
<td>SPAN 201, 202, 240</td>
<td>11</td>
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<tr>
<td>Studio Art Drawing</td>
<td>3, 4, 5</td>
<td>ARTS 100</td>
<td>3</td>
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<tr>
<td>Studio Art: 2-D Design</td>
<td>3, 4, 5</td>
<td>ARTS 102</td>
<td>3</td>
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<tr>
<td>Studio Art: 3-D</td>
<td>3, 4, 5</td>
<td>ARTS 103</td>
<td>3</td>
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<td>U.S. Government and Politics</td>
<td>3, 4, 5</td>
<td>POLS 101</td>
<td>3</td>
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<tr>
<td>United States History</td>
<td>3, 4, 5</td>
<td>HIST 101 and 102</td>
<td>6</td>
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<tr>
<td>World History</td>
<td>3, 4, 5</td>
<td>HIST 111, 112</td>
<td>6</td>
</tr>
</tbody>
</table>

Students should request that results be sent to the specific Ivy Tech region they plan to attend. Credit will be awarded only if the AP tests are applicable to the program concerned.

APPENDIX
INDIANA CAREER CLUSTERS—This information is provided to help students select an appropriate career academic sequence. For more detailed information about career clusters go to http://www.careerclusters.org/.

**Agriculture, Food, and Natural Resources**
Careers within this cluster include the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

**Architecture & Construction**
Careers within this cluster focus on designing, planning, managing, building and maintaining of physical and environmental structures.

**Arts, A/V Technology, and Communication**
Careers in this cluster involve designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

**Business Management and Administration**
Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

**Education & Training**
Careers within this cluster include planning, managing, and providing education and training services, and related learning support services.

**Finance**
Careers within this cluster require planning and providing services for financial and investment institutions, banking, insurance, and business financial management.

**Government & Public Administration**
Careers in this field require executing government functions to include governance, national security, foreign services, revenue and taxation, regulation, and management and administration at the local, state, and federal levels.

**Health Science**
Careers in this cluster require planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

**Hospitality & Tourism**
Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.

**Human Services**
Careers in this cluster relate to services provided to families and human needs, such as consumer services, counseling, early childhood development, family and community services, and personal care services.

**Information Technology**
Careers in this cluster require design, development, support and management of hardware, software, multimedia, and systems integration services in the areas of information support and services, interactive media, network systems, and programming and software development.

**Law, Public Safety, Corrections, & Security**
Careers in this field require planning, managing, and providing legal, public safety, protective services, homeland security, including professional and technical support services in the areas of correction, emergency and fire services, law enforcement, legal services, and security.

**Manufacturing**
Careers within this cluster include planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities, such as production planning and control, maintenance, and manufacturing/process engineering.

**Marketing Sales & Services**
Careers in this cluster require planning, managing, and performing marketing activities to reach organizational objectives.

**Science, Technology, Engineering, & Mathematics**
Careers in this cluster include planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

**Transportation, Distribution, & Logistics**
Careers within this cluster include the planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.
MILITARY EXPERIENCE – High School Credits

The local school board shall have the option of recognizing training and experience obtained in the United States Armed Forces in meeting high school graduation requirements, e.g.:

- **Basic Training** - A maximum of four (4) credits may be recognized in the following areas:
  - Physical Education 2 credits
  - Health & Safety 2 credits
  For basic training, a maximum of one (1) credit may be granted for each of three months of service.

- **Overseas Instruction** - Credit may be awarded for courses completed through accredited colleges and universities as recommended by the respective colleges and universities, such as the University of Maryland overseas instruction.

- **Service Training School** - Credit may be granted in accordance with recommendations made by the American Council of Education in the publication “Guide to the Evaluation of Educational Experience in the Armed Forces.” When the descriptions of service schools are not listed in this guide, appropriate credit recommendations may be obtained by writing to the American Council on Education.

- **Armed Services Institutes** - Credit may be awarded for courses completed in the United States Armed Forces Institute, Marine Corps Institute, and the Coast Guard Institute, provided that the courses shall be validated by terminal examinations as recommended by the American Council on Education. Credit may be awarded in recognition of satisfactory achievement on examinations in established high school courses.