North Decatur Jr/Sr High School

**Administrative Staff**

Mrs. Debbie Reynolds, Principal

Mr. Chris Thurston, Assistant Principal

**Guidance Staff**

Mrs. Barb Lecher, School Counselor  
Counseling all students grades 7-12, last names beginning A-L

Mrs. Jennifer Bowles, School Counselor  
Counseling all students grades 7-12, last names beginning M-Z

Mrs. Diane Bedel  
Registrar & Guidance Secretary
**Dear Students and Parents,**

**Students** - Choosing your high school course of study is an important decision. Choices you make now will either expand or limit your future opportunities. This Scheduling Guide was prepared to help you navigate your way through the scheduling process and choose the curriculum that is best suited to your interests, strengths, and goals. Please read the important information provided in this guide, discuss options with your parents, and ask questions of teachers and counselors.

**Parents** - You are encouraged to be actively involved in your student’s course selections and are welcome to schedule a conference with your child’s counselor.

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North Decatur Guidance Office

NDHS Scheduling Guide 2
GENERAL SCHEDULING INFORMATION / DEADLINES

Scheduling is a complicated task. When completed, changes are difficult to make. Therefore, scheduling and drop/add deadlines must be enforced. When school begins in the fall, requests for schedule changes may be made THROUGH THE FIRST FIVE DAYS OF THE SEMESTER. Changes will be approved during this time period for legitimate reasons only. Changes made after this time will be those resulting from teacher, counselor, or administrator recommendations only. Any other changes will result in a withdrawal “F” on the student’s transcript.

SCHEDULING RESOURCES

Many elements enter into career decisions. Thus, it is wise to explore your options thoroughly in order to make the most informed decisions leading to the best outcomes for your future. Listed below are some valuable resources to help you along on your decision-making journey:

Learn More Indiana
http://www.learnmoreindiana.org

Indiana Career Explorer
http://www.indianacareerexplorer.org

Hoosier Hot 50 Jobs
https://netsolutions.dwd.in.gov/hh50/jobList.aspx

The Occupational Outlook Handbook
http://www.bls.gov/ooh/

Indiana Department of Education
http://www.doe.in.gov

21st Century Scholars
http://scholars.in.gov

Indiana Core Transfer Library
http://www.transferin.net/index.aspx

Ivy Tech Dual Credit
https://www.ivytech.edu/dual-credit/index.html

The College Board / PSAT / SAT
http://www.collegeboard.org

ACT
http://www.actstudent.org

NCAA Eligibility Center
http://www.eligibilitycenter.org

NDHS Scheduling Guide 3
The purpose for this graduation pathway recommendation from the State Board of Education is to create an educated and talented workforce able not just to meet the needs of business and higher education, but able to succeed in all postsecondary endeavors. To account for the rapidly changing, global economy, every K-12 student needs to be given the tools to succeed in some form of quality postsecondary education and training, including an industry recognized certificate program, an associate’s degree program, or a bachelor’s degree program.

These recommendations seek to ensure that every Hoosier student graduates from high school with:

1. A broad awareness of an engagement with individual career interests and associated career options
2. A strong foundation of academic and technical skills
3. Demonstrable employability skills that lead directly to meaningful opportunities for postsecondary education, training, and gainful employment.

Students in the graduating class of 2023 must satisfy all three of the following Graduation Pathway Requirements by completing one of the associated Pathway Options:

<table>
<thead>
<tr>
<th>Graduation Requirements</th>
<th>Graduation Pathway Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) High School Diploma</td>
<td>Meet the statutorily defined diploma credit and curricular requirements</td>
</tr>
<tr>
<td>2) Learn and Demonstrate Employability Skills (Students must complete at least one of the following.)</td>
<td>Learn employability skills standards through locally developed programs. Employability skills are demonstrated by one of the following:</td>
</tr>
<tr>
<td>3) Postsecondary-Ready Competencies (Students must complete at least one of the following.)</td>
<td>● Honors diploma: Fulfill all requirements of either the Academic or Technical Honors Diploma</td>
</tr>
</tbody>
</table>

- ACT: College-ready benchmarks
- SAT: College-ready benchmarks
- ASVAB: Earn at least a minimum AFQT score to qualify for placement into one of the branches of the US Military
- State- and Industry-recognized Credential or Certification
- Federally-recognized Apprenticeship
- Career-Technical Education Concentrator: Must earn a C average or higher in at least 2 non-duplicative advanced courses within a particular program
- AP/Dual Credit: Must earn a C average or higher in at least three courses
- Locally create pathway that meets the framework from and earns the approval of the State Board of Education
NDHS Graduation Pathways Parent Checklist

**Decatur County Community Schools**

**Graduation Pathway Checklist**

Student Name: ___________________________  Cohort: ________

*Students must complete all three Graduation Pathway Requirements*

### Graduation Requirements

<table>
<thead>
<tr>
<th>Graduation Pathway Options/Descriptions</th>
<th>1 High School Diploma</th>
<th>2 Learn &amp; Demonstrate Employability Skills</th>
<th>3 Postsecondary-Ready Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meet the State of Indiana requirements for a high school diploma:</td>
<td>☐ General ☐ Core 40 ☐ Academic Honors ☐ Technical Honors</td>
<td>Students must complete one of the following:</td>
<td>☐ Project-Based Learning: Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or another experience as approved by the State Board of Education. Description: ____________________________________________________________ Verification Product: ____________________________________________________________</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>☐ ACT College Ready Benchmarks (18 in English or 22 in Reading and 22 in Math or 23 in Science)  English ______ or Reading ______ and Math ______ or Science ______</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>☐ CTE Concentrator (&quot;C&quot; average in at least 6 high school credits in career sequence) CTE1 _____ CTE2_____ CTE3_____ CTE4______ CTE5_____ CTE6_____ CTE Course GPA ______</td>
</tr>
</tbody>
</table>

Counselor Signature: ___________________________ Date: ______________

NDHS Scheduling Guide 5
Decatur County Community Schools
“Bucket 2” Options

Student Name: _______________________________________
Cohort: ______________

Each student must complete one of the options below - Please fill out ONE of the 3 forms after this page as verification of completing Requirement #2 & return to the Guidance Office!

1 Project-Based Learning
Project-based learning allows students to gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. The project is framed by a meaningful problem to solve or a question to answer, at the appropriate level of challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make their project work public by explaining, displaying and/or presenting it to people beyond the classroom.

PBL Activity/Product:__________________________________________________________________________
__________________________________________________________________________________________

PBL Satisfied by DCCS Course: □ PLTW ______________________ □ SAE (year) ________________________
□ C4 _________________________ □ Other: ____________________________

Teacher Name: ________________________________________________________ Date: _____________________

2 Service-Based Learning
Service-based learning integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility (and other employability skills), and strengthen communities.

SBL Activity/Product:__________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

3 Work-Based Learning
Work-based learning (WBL) is a strategy to reinforce academic, technical, and social skills learned in the classroom through collaborative activities with employer partners. Work-based learning experiences allow students to apply classroom theories to practical problems, to explore career options, and pursue personal and professional goals.

WBL Activity/Product:__________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________

WBL Satisfied by: □ Governor’s Work Ethic Certificate
□ Employment Outside of School Day ____________________________________________________________
□ Other Experience Approved by SBOE ___________________________________________________________

Student Signature: __________________________ Date: __________
Counselor Signature: __________________________ Date: __________
Decatur County Community Schools
Athletic/Club/Extracurricular Verification Form

Student Name: _______________________________________

This form must be completed in its entirety

1. Athletic Team/Club/Extracurricular Membership Coach/Sponsor Section

Sport/Club/Extracurricular Name: ________________________________

Coach/Sponsor’s Name: ________________________________

Academic Year/Season of Participation: ________________________________

Total Years of Involvement (grades 9-12): ________________________________

Does/Did the student participate in any community service through this sport/club? [ ] Yes [ ] No

**If yes to the above question, please list those experiences here: ________________________________

____________________________________________________________________________________

Did the student hold any leadership positions and/or officer titles? ________________________________

____________________________________________________________________________________

The information provided in this section is an accurate reflection of the participation of this student on the athletic team, club, or other approved extracurricular described above.

Coach/Sponsor’s Signature: ________________________________ Date: ______________

2. Student Section

(Please provide a reflection of your athletic/club experience)

Please describe how this experience has impacted you educationally or how it relates to you strengthening your employability skills.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

Please describe how your involvement benefited the athletic team/club.

____________________________________________________________________________________

____________________________________________________________________________________

____________________________________________________________________________________

The participation in the athletic team/club relates to the Indiana Academic Standard 5 for United States Government (Roles of Citizens in the United States). I will utilize the skills learned from this activity to continue to contribute to the well-being of my community.

Student Signature: ________________________________ Date: ______________

Counselor Signature: ________________________________ Date: ______________

Basketball, Cheerleading, FFA, 4-H, SADD, and Marching Band are examples of membership experiences that this form should be used to document.

NDHS Scheduling Guide 7
Decatur County Community Schools
Community Service Verification Form

Student Name: ___________________________ Cohort: _____________

This form must be completed in its entirety

1 Community Service Provider Section
Community or Volunteer Service Organization: ___________________________________________________________

Supervisor’s Name: _____________________________________________________________________________

Company/Employer Address: _____________________________________________________________________

Company/Employer Phone #: (_____) ______________________________________________________________________

Date of the Community Service Activity: ___________________________________________________________________

Total # of Hours Served: _____________________________________________________________________________

What Type of Community Service was Completed? ___________________________________________________________________

The information provided in this section is an accurate reflection of the number of hours and type of community service
performed by the student.

Supervisor’s Signature: __________________________________Date: ___________

2 Student Section (Please provide a reflection of your community service or volunteer experience)

Please describe how this experience has impacted you educationally or how it relates to you strengthening your
employability skills.

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Please describe how our involvement benefited the community service organization.

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

The community service performed relates to the Indiana Academic Standard 5 for United States Government (Roles of Citizens in the
United States). I will utilize the skills learned from this activity to continue to contribute to the well-being of my community.

Student Signature: _____________________________ Date: _____________

Counselor Signature: _____________________________ Date: _____________

NDHS Scheduling Guide 8
Decatur County Community Schools
Employment Verification Form

Student Name: _______________________________________  Cohort: ______________

This form must be completed in its entirety

1 Employer Section

Company/Employer Name: __________________________________________________________

Supervisor's Name: _____________________________________________________________

Company/Employer Address: _____________________________________________________

Company/Employer Phone #: (_____) ________________________________________________

Date Hired: ___________________  Leave Date (if applicable): _________________________

Please provide any additional comments about this student (optional):
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Supervisor Signature: ___________________________  Date: _________________________

2 Student Section

Please provide a reflection of your work experience. Please include how your work experience has allowed you to
demonstrate employability skills and any lessons you have learned from this work experience.
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Student Signature: ___________________________  Date: ______________

Counselor Signature: ___________________________  Date: ______________
CHOOSING A CURRICULUM

Your first decision when scheduling your course requests is to decide which diploma you intend to pursue:

- Core 40 (40 credits)
- Core 40 with Academic Honors (47 credits)
- Core 40 with Technical Honors (47 credits)

In making this decision, keep in mind that completion of a Core 40 diploma is an Indiana graduation requirement. Indiana's Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce. You are encouraged to attempt the most challenging diploma you think you can achieve considering your academic potential, your interests, and your goals. Talk to your teachers and counselors for recommendations.

THE OPT-OUT PROCESS

For some students, circumstances make completion of a Core 40 diploma unrealistic. 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 the student will pursue is determined. This decision should not be made lightly, and the student and parent(s) must understand that, as a general rule, without a Core 40 diploma:

- Students may not be prepared to pass the Indiana End-of-Course Assessments required for graduation.
- Students may not be admitted to most four-year colleges but could attend a four-year college via transfer from Ivy Tech and/or Vincennes University.
- Some students may be less prepared for and less competitive in the workplace.

In any case, to graduate with less than Core 40, the following formal “opt-out” process must be completed:

- ✔ The student, the student’s parent/guardian, and the student’s counselor (or another staff member who assists students in course selection) meet to discuss the student’s progress.
- ✔ The student’s career and course plan is reviewed.
- ✔ The student’s parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
### Course and Credit Requirements

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<tr>
<th>Category</th>
<th>Credits</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English/Language Arts</strong></td>
<td>8 credits</td>
<td>Including a balance of literature, composition, and speech.</td>
</tr>
</tbody>
</table>
| **Mathematics**   | 6 credits (in grades 9-12) | 2 credits: Algebra I  
2 credits: Geometry  
2 credits: Algebra II  
*Students must take a math or quantitative reasoning course each year in high school.* |
| **Science**       | 6 credits | 2 credits: Biology I  
2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics  
2 credits: Any Core 40 science course |
| **Social Studies**| 6 credits | 2 credits: US History  
1 credit: US Government  
1 credit: Economics  
2 credits: World History/Civilization or Geography/History of the World |
| **Directed Electives** | 5 credits | World Languages  
Fine Arts  
Career and Technical Education |
| **Physical Education** | 2 credits |                                            |
| **Health and Wellness** | 1 credit |                                            |
| **Electives*”**   | 6 credits | (College and Career Pathway courses are recommended.) |

*Schools may have additional local graduation requirements that apply to all students.  
*Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. All students are strongly encouraged to complete a College and Career Pathway (selecting electives in a deliberate manner) to take full advantage of career and college exploration and preparation opportunities.*

NDHS Scheduling Guide 11


**CORE 40 with Academic Honors**  
(minimum 47 credits)

- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits. (6 credits in one language or 4 credits each in two languages)
- Earn 2 Core 40 fine arts credits.
- 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.
- 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 the approved dual credit list.
  C. Earn both of the following:
     1. A minimum of 3 verifiable transcripted college credits from the approved dual credit list.
     2. 2 credits in AP courses and corresponding AP exams.
  D. Earn a combined score of 1250 or higher and a minimum score of 560 on the math section and a 590 on the evidence based reading and writing section.
  E. Earn an ACT composite score of 26 or higher and complete written section.

---

**CORE 40 with Technical Honors**  
(minimum 47 credits)

- Complete all requirements for Core 40.
- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
  1. State approved, industry recognized certification or credential.
  2. Pathway dual credits from the approved dual credit list resulting in 6 transcripted college credits.
- Earn a grade of “C-” or better in courses that will count toward the diploma.
- Have a grade point average of a “B” or better.
- 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, and Locating Information - Level 5.
  C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.
  D. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80.
Indiana General High School Diploma

The completion of Core 40 is an Indiana graduation requirement. Indiana’s Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce.

To graduate with less than Core 40, the following formal opt-out process must be completed:

- The student, the student’s parent/guardian, and the student’s counselor (or another staff member who assists students in course selection) must meet to discuss the student’s progress.
- The student’s Graduation Plan (including four-year course plan) is reviewed.
- The student’s parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
- 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 the student will pursue is determined.

<table>
<thead>
<tr>
<th>Course and Credit Requirements (Class of 2016 &amp; Beyond)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English/Language Arts</strong></td>
</tr>
<tr>
<td>8 credits</td>
</tr>
<tr>
<td>Credits must include literature, composition, and speech.</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
</tr>
<tr>
<td>4 credits</td>
</tr>
<tr>
<td>2 credits: Algebra I</td>
</tr>
<tr>
<td>2 credits: Any math course</td>
</tr>
<tr>
<td>General diploma students are required to earn 2 credits in a Math or a Quantitative Reasoning (QR) course during their junior or senior year. QR courses do not count as math credits.</td>
</tr>
<tr>
<td><strong>Science</strong></td>
</tr>
<tr>
<td>4 credits</td>
</tr>
<tr>
<td>2 credits: Biology I</td>
</tr>
<tr>
<td>2 credits: Any science course</td>
</tr>
<tr>
<td>At least one credit must be from a Physical Science or Earth and Space Science course.</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
</tr>
<tr>
<td>4 credits</td>
</tr>
<tr>
<td>2 credits: US History</td>
</tr>
<tr>
<td>1 credit: US Government</td>
</tr>
<tr>
<td>1 credit: Any social studies course</td>
</tr>
<tr>
<td><strong>Physical Education</strong></td>
</tr>
<tr>
<td>2 credits</td>
</tr>
<tr>
<td><strong>Health and Wellness</strong></td>
</tr>
<tr>
<td>1 credit</td>
</tr>
</tbody>
</table>

| College and Career Pathway Courses                        |
| 6 credits                                                 |
| Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities. |

| Flex Credits                                              |
| 5 credits                                                 |
| Flex Credits must come from one of the following:         |
| ● Additional elective courses in a College and Career Pathway |
| ● Courses involving workplace learning such as Cooperative Education or Internship courses |
| ● High school/college dual credit courses                 |
| ● Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages, or Fine Arts |

| Electives                                                 |
| 6 credits                                                 |
| Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years. |

**40 Total Credits Required**

Schools may have additional local graduation requirements that apply to all students.
<table>
<thead>
<tr>
<th>Cluster</th>
<th>Pathway Program Study</th>
<th>School</th>
<th>DOE Code</th>
<th>Concentrator Course A</th>
<th>DOE Code</th>
<th>Concentrator Course B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>Ag Power, Structure &amp; Tech Systems</td>
<td>NDHS</td>
<td>5088</td>
<td>Ag Power, Structure, &amp; Technology</td>
<td>5002</td>
<td>Agribusiness Management</td>
</tr>
<tr>
<td></td>
<td>Animal Systems</td>
<td>NDHS</td>
<td>5070</td>
<td>ALS Animals</td>
<td>5002</td>
<td>Agribusiness Management</td>
</tr>
<tr>
<td></td>
<td>Horticulture &amp; Landscape</td>
<td>NDHS</td>
<td>5132</td>
<td>Horticultural Science</td>
<td>5136</td>
<td>Landscape Management I</td>
</tr>
<tr>
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<td>Plant Systems</td>
<td>NDHS</td>
<td>5074</td>
<td>ALS Plants &amp; Soils</td>
<td>5002</td>
<td>Agribusiness Management</td>
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<tr>
<td>Architecture &amp; Construction</td>
<td>Construction</td>
<td>C4</td>
<td>5580</td>
<td>Construction Trades I</td>
<td>5578</td>
<td>Construction Trades II</td>
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<td>Construction Trades: Electrical I</td>
<td>4832</td>
<td>Construction Trades: Electrical II</td>
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<td>Architectural Drafting &amp; Design</td>
<td>C4</td>
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<td>Architectural Drafting &amp; Design I</td>
<td>5652</td>
<td>Architectural Drafting &amp; Design II</td>
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<td>Mechanical</td>
<td>C4</td>
<td>4836</td>
<td>Mechanical Drafting &amp; Design I</td>
<td>4838</td>
<td>Mechanical Drafting &amp; Design II</td>
</tr>
<tr>
<td>Arts, AV Tech, &amp; Communications</td>
<td>Interactive Media</td>
<td>C4</td>
<td>5232</td>
<td>Interactive Media</td>
<td>5550</td>
<td>Graphic Design &amp; Layout</td>
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<td>Radio &amp; TV</td>
<td>C4</td>
<td>5986</td>
<td>Radio &amp; TV II</td>
<td>5992</td>
<td>Radio &amp; TV II</td>
</tr>
<tr>
<td></td>
<td>Graphic Imaging</td>
<td>C4</td>
<td>5232 or 5550</td>
<td>Interactive Media or Graphic Design &amp; Layout</td>
<td>5572</td>
<td>Graphic Imaging Technology</td>
</tr>
<tr>
<td>Education &amp; Training</td>
<td>Education Careers</td>
<td>C4</td>
<td>5408</td>
<td>Education Professions I</td>
<td>5404</td>
<td>Education Professionals II</td>
</tr>
<tr>
<td></td>
<td>Early Childhood</td>
<td>C4</td>
<td>5412</td>
<td>Early Childhood Education I</td>
<td>5406</td>
<td>Early Childhood Education II</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>Biomed/Tech</td>
<td>SDHS</td>
<td>5216</td>
<td>PLTW Human Body Systems</td>
<td>5217</td>
<td>PLTW Medical Interventions</td>
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<tr>
<td></td>
<td>Dental</td>
<td>C4</td>
<td>5203</td>
<td>Dental Careers I</td>
<td>5204</td>
<td>Dental Careers II</td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td>C4 or SDHS</td>
<td>5282</td>
<td>Health Science Education I</td>
<td>5284</td>
<td>Health Science Education II: Nursing</td>
</tr>
<tr>
<td></td>
<td>Vet</td>
<td>C4</td>
<td>5211</td>
<td>Veterinary Careers I</td>
<td>5212</td>
<td>Veterinary Careers II</td>
</tr>
<tr>
<td></td>
<td>Cosmetology</td>
<td>C4</td>
<td>5802</td>
<td>Cosmetology I</td>
<td>5806</td>
<td>Cosmetology II</td>
</tr>
<tr>
<td>Cluster</td>
<td>Pathway Program Study</td>
<td>School</td>
<td>Max Credits</td>
<td>Required Courses</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hospitality &amp; Human Services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>C4</td>
<td>5440</td>
<td>Culinary Arts &amp; Hospitality I</td>
<td>5458 Culinary Arts &amp; Hospitality II: CA</td>
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<tr>
<td>Hospitality Mgmt</td>
<td>C4</td>
<td>5440</td>
<td>Culinary Arts &amp; Hospitality I</td>
<td>5458 Culinary Arts &amp; Hospitality II: HM</td>
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<tr>
<td>Information Tech</td>
<td>Networking</td>
<td>C4</td>
<td>5234 Networking I</td>
<td>4588 Networking II: Infrastructure OR Servers</td>
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<td></td>
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<tr>
<td>Manufacturing &amp; Logistics</td>
<td>Electronics</td>
<td>C4</td>
<td>5684 Electronics &amp; Computer Technology I</td>
<td>5694 Electronics &amp; Computer Technology II</td>
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<tr>
<td></td>
<td>Robotics</td>
<td>C4</td>
<td>5610 Industrial Automation &amp; Robotics I</td>
<td>5612 Industrial Automation &amp; Robotics II</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Machine Tech</td>
<td>C4</td>
<td>5782 Precision Machining I</td>
<td>5784 Precision Machining II</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Welding</td>
<td>C4</td>
<td>5776 Welding Technology I</td>
<td>5778 Welding Technology II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Safety</td>
<td>Criminal Justice</td>
<td>C4</td>
<td>5822 Criminal Justice I</td>
<td>5824 Criminal Justice II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEM</td>
<td>Engineering</td>
<td>NDHS</td>
<td>4814 PLTW Principles of Engineering</td>
<td>4820 PLTW Civil Engineering &amp; Architecture OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4826 PLTW Digital Electronics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>Auto Tech</td>
<td>C4</td>
<td>5510 Automotive Services Technology I</td>
<td>5546 Automotive Services Technology II</td>
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</table>

### Locally Created Pathways

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Pathway Program Study</th>
<th>School</th>
<th>Max Credits</th>
<th>Required Courses</th>
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<tbody>
<tr>
<td>Civic Arts</td>
<td>Art</td>
<td>NDHS</td>
<td>2</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>1</td>
<td>Introduction to 2-D Art</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>1</td>
<td>Introduction to 3-D Art</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>2</td>
<td>Ceramics I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>2</td>
<td>Drawing &amp; Painting 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>6</td>
<td>Advanced 3-D Art</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>6</td>
<td>Advanced 2-D Art</td>
</tr>
<tr>
<td></td>
<td>Band</td>
<td>NDHS</td>
<td>2</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NDHS</td>
<td>8</td>
<td>Concert Band</td>
</tr>
</tbody>
</table>
QUANTITATIVE REASONING COURSES

A quantitative reasoning course is a high school course that “advances a student’s ability to apply mathematics in real world situations and contexts” and that “deepens a student’s understanding of high school mathematics standards.”

For the Core 40, Academic Honors, and Technical Honors Diplomas, students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.

For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.

The following courses satisfy the quantitative reasoning requirement:

At North Decatur
- Personal Financial Responsibility
- Agribusiness Management
- Landscape Management I
- Advanced Life Science, Animals
- Advanced Life Science, Foods
- Integrated Chemistry-Physics
- Chemistry I
- AP Chemistry
- Physics I
- AP Biology
- Economics
- AP Macroeconomics
- PLTW Principles of Engineering
- PLTW Digital Electronics
- PLTW Civil Engineering & Architecture

At C4 Columbus Area Career Connection
- Architectural Drafting & Design II
- Mechanical Drafting & Design II
- Construction Trades II
- Construction Trades: Electrical II
- Electronics & Computer Technology II
- Industrial Automation & Robotics II
- Precision Machining I
- Precision Machining II

DUAL CREDIT PRIORITY COURSE LIST

Courses counting as “dual credit” under the Academic Honors or Technical Honors Diplomas must be “verifiable” and from the Priority Course List set forth by the Commission for Higher Education. There are two subsections that comprise the Priority Course List:

- Liberal Arts
- Career & Technical Education

Dual credit courses at North Decatur that are on the Priority Course List are denoted on the next page.
DUAL CREDIT COURSES

Dual credit is the term given to courses in which high school students have the opportunity to earn both high school and college credits simultaneously. Dual credit courses are taught by high school or college faculty either at the high school, at the college or university, or sometimes through online courses or distance education. Most dual credit courses have prerequisites that students must meet in order to qualify for the credit.

**Dual Credit Courses Currently Available at North Decatur:**

<table>
<thead>
<tr>
<th>High School Course</th>
<th>College Course</th>
<th>Credits</th>
<th>Priority Course List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agribusiness Management</td>
<td>AGRI 102</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Animal Science</td>
<td>AGRI 103</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Plant &amp; Soil Science</td>
<td>AGRI 105</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Ag Power I &amp; II</td>
<td>AGRI 106</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>ALS, Animals</td>
<td>AGRI 107</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>ALS, Plants &amp; Soils</td>
<td>AGRI 109</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>AGRI 115</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Horticultural Science</td>
<td>AGRI 116</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Landscape Management I</td>
<td>AGRI 164</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Digital Apps &amp; Responsibility</td>
<td>CINS 101</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUSN 101</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Computers in Design &amp; Production</td>
<td>DESN 101</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>PLTW Intro to Eng Design</td>
<td>DESN 101/113</td>
<td>6</td>
<td>YES</td>
</tr>
<tr>
<td>PLTW Principles of Eng</td>
<td>DESN 104</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>PLTW Civil Eng &amp; Arch</td>
<td>DESN 105</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>PLTW Digital Electronics</td>
<td>EECT 112</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Honors English 12</td>
<td>ENGL 111/215</td>
<td>6</td>
<td>YES</td>
</tr>
<tr>
<td>English 12</td>
<td>ENGL 111/211</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>College Speech (IU ACP)</td>
<td>SPCH S121</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Human Development &amp; Wellness</td>
<td>HLHS 111</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Finite Mathematics</td>
<td>MATH 135</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td>MATH 136</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>MATH 137</td>
<td>3</td>
<td>YES</td>
</tr>
<tr>
<td>AP Calculus AB</td>
<td>MATH 211</td>
<td>4</td>
<td>NO</td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>CHEM 105</td>
<td>5</td>
<td>YES</td>
</tr>
<tr>
<td>AP Biology</td>
<td>BIOL 105</td>
<td>5</td>
<td>YES</td>
</tr>
<tr>
<td>Spanish III</td>
<td>SPAN 101/102</td>
<td>8</td>
<td>YES</td>
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<tr>
<td>Spanish IV</td>
<td>SPAN 201/202</td>
<td>6</td>
<td>YES</td>
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<tr>
<td>Visual Communication</td>
<td>VISC 115/102</td>
<td>6</td>
<td>NO</td>
</tr>
</tbody>
</table>

*Available dual credit courses are subject to change.*

**Numerous C4 courses are on the priority course list as well.**
ADVANCED PLACEMENT COURSES

The College Board’s AP courses are college-level classes in a wide variety of subjects that offer challenging coursework and a taste of what college classes are like, helping you acquire the skills and habits you'll need to be successful in college. You'll improve your writing skills, sharpen your problem-solving abilities, and develop time management skills, discipline, and study habits. Most four-year colleges in the United States and colleges in more than 60 other countries give students credit, advanced placement, or both on the basis of AP Exam scores. Exam fees for those AP courses not paid for by the state of Indiana are included on students’ bookbills.

AP Courses Currently Available at North Decatur:

- AP US History
- AP Macroeconomics
- AP Art History
- AP Music Theory
- AP Calculus AB
- AP Biology
- AP Chemistry

WEIGHTED COURSES

The Decatur County Community Schools Board of Education approved a weighted system of grades in selected upper-level courses beginning with the 2007-2008 school year. The following courses are given additional point values in the calculation of the student’s grade point average:

- ✔ Any Advanced Placement (AP) course
- ✔ Any dual credit English course
- ✔ Any 4th year world language course
- ✔ Any 3rd or 4th year Project Lead The Way (PLTW) course

One additional grade point shall be added to the standard grade points awarded for each semester grade in each of the above listed courses.

For example:

<table>
<thead>
<tr>
<th>Student Earns</th>
<th>Standard Grade Points</th>
<th>Weighted Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-</td>
<td>2.667</td>
<td>3.667</td>
</tr>
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</table>
Example Four Year Plan:

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
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<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td><strong>Semester 2</strong></td>
<td><strong>Semester 1</strong></td>
<td><strong>Semester 2</strong></td>
</tr>
<tr>
<td>1) English 9</td>
<td>1. English 9</td>
<td>1. English 11 or Composition</td>
<td>1. English 12 or College English</td>
</tr>
<tr>
<td>3) Science (Biology or ICP)</td>
<td>3. Science (Biology or ICP)</td>
<td>3. Science</td>
<td>3. Economics or AP Macroeconomics</td>
</tr>
<tr>
<td>5) Foreign Language (Spanish I)?</td>
<td>5. Foreign Language (Spanish I)?</td>
<td>5. Foreign Language (Spanish III)?</td>
<td>5.</td>
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<tr>
<td>7) ________________</td>
<td>7. ________________</td>
<td>7. ________________</td>
<td>7. ________________</td>
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</table>

NDHS Scheduling Guide 19
# MASTER LIST OF COURSES

## AGRICULTURE

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Terms</th>
<th>Grades</th>
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</thead>
<tbody>
<tr>
<td>5228</td>
<td>Supervised Agricultural Experience</td>
<td>Summer</td>
<td>9-12</td>
</tr>
<tr>
<td>5056</td>
<td>Introduction to Agriculture, Food, &amp; Natural Resources</td>
<td>Year</td>
<td>9-12</td>
</tr>
<tr>
<td>5008</td>
<td>Animal Science / AGRI 103</td>
<td>Year</td>
<td>9-12</td>
</tr>
<tr>
<td>5170</td>
<td>Plant and Soil Science / AGRI 105</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5180</td>
<td>Natural Resources / AGRI 115</td>
<td>Semester</td>
<td>9-12</td>
</tr>
<tr>
<td>5132</td>
<td>Horticultural Science / AGRI 116</td>
<td>Semester</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5088</td>
<td>Agriculture Power, Structure, and Technology I / AGRI 106</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5088</td>
<td>Agriculture Power, Structure, and Technology II / AGRI 106</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5136</td>
<td>Landscape Management I / AGRI 164</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5002</td>
<td>Agribusiness Management / AGRI 102</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5070</td>
<td>Advanced Life Science, Animals / AGRI 107</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5074</td>
<td>Advanced Life Science, Plants and Soils / AGRI 109</td>
<td>Year</td>
<td>Dual Credit</td>
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</table>

## BUSINESS, INFORMATION TECHNOLOGY, MARKETING, & ENTREPRENEURSHIP

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Terms</th>
<th>Grades</th>
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</thead>
<tbody>
<tr>
<td>4518</td>
<td>Introduction to Business</td>
<td>Year</td>
<td>9-12</td>
</tr>
<tr>
<td>4528</td>
<td>Digital Applications and Responsibility / CINS 101</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>5394</td>
<td>Preparing for College and Careers</td>
<td>Semester</td>
<td>10</td>
</tr>
<tr>
<td>4540</td>
<td>Personal Financial Responsibility</td>
<td>Semester</td>
<td>10-12</td>
</tr>
<tr>
<td>4524</td>
<td>Introduction to Accounting</td>
<td>Year</td>
<td>10-12</td>
</tr>
<tr>
<td>4574</td>
<td>Web Design</td>
<td>Semester</td>
<td>11-12</td>
</tr>
<tr>
<td>4560</td>
<td>Business Law and Ethics</td>
<td>Semester</td>
<td>11-12</td>
</tr>
<tr>
<td>4562</td>
<td>Principles of Business Management</td>
<td>Year</td>
<td>11-12</td>
</tr>
<tr>
<td>4803</td>
<td>PLTW Computer Science Essentials</td>
<td>Year</td>
<td>9-12</td>
</tr>
<tr>
<td>5253</td>
<td>PLTW Computer Science: Cybersecurity</td>
<td>Year</td>
<td>10-12</td>
</tr>
<tr>
<td>5268</td>
<td>Administrative and Office Management</td>
<td>Year</td>
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</table>

## ENGINEERING AND TECHNOLOGY / PLTW ENGINEERING

<table>
<thead>
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<th>Course Title</th>
<th>Terms</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>4800</td>
<td>Computers in Design and Production / DESN 101</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>4812</td>
<td>PLTW Introduction to Engineering Design / DESN 101 &amp; 113</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>4814</td>
<td>PLTW Principles of Engineering / DESN 104</td>
<td>Year</td>
<td>Dual Credit</td>
</tr>
<tr>
<td>4826</td>
<td>PLTW Digital Electronics / EECT 112</td>
<td>Year</td>
<td>DC/Weighted</td>
</tr>
<tr>
<td>4820</td>
<td>PLTW Civil Engineering and Architecture / DESN 105</td>
<td>Year</td>
<td>DC/Weighted</td>
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</table>

## ENGLISH / LANGUAGE ARTS

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Terms</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>1002</td>
<td>English 9</td>
<td>Year</td>
<td>9</td>
</tr>
<tr>
<td>1004</td>
<td>English 10</td>
<td>Year</td>
<td>10</td>
</tr>
<tr>
<td>1006</td>
<td>English 11</td>
<td>Year</td>
<td>11</td>
</tr>
<tr>
<td>1020</td>
<td>AP American Literature</td>
<td>Semester</td>
<td>11</td>
</tr>
<tr>
<td>1090</td>
<td>AP Composition</td>
<td>Semester</td>
<td>11</td>
</tr>
<tr>
<td>1008</td>
<td>English 12 Technical Writing / ENGL 211</td>
<td>Semester</td>
<td>12</td>
</tr>
<tr>
<td>1034</td>
<td>Film Literature</td>
<td>Semester</td>
<td>12</td>
</tr>
<tr>
<td>1008</td>
<td>Honors English 12 / ENGL 111 &amp; 215</td>
<td>Year</td>
<td>DC/Weighted</td>
</tr>
<tr>
<td>1086</td>
<td>Student Media (Newspaper/Yearbook)</td>
<td>Year</td>
<td>10-12</td>
</tr>
<tr>
<td>1078</td>
<td>Advanced Speech and Communication / SPCH S121</td>
<td>Semester</td>
<td>DC/Weighted</td>
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## FAMILY AND CONSUMER SCIENCES

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Terms</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>5330</td>
<td>Adult Roles &amp; Responsibilities</td>
<td>Semester</td>
<td>9-12</td>
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<td>5364</td>
<td>Interpersonal Relationships</td>
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<td>9-12</td>
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<td>5366</td>
<td>Human Development and Wellness / HLHS 111</td>
<td>Semester</td>
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<td>Nutrition and Wellness</td>
<td>Semester</td>
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<td>5340</td>
<td>Advanced Nutrition and Wellness</td>
<td>Semester</td>
<td>9-12</td>
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<td>5362</td>
<td>Child Development</td>
<td>Semester</td>
<td>10-12</td>
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5360 Advanced Child Development Semester 10-12
5072 Advanced Life Science, Foods Year 11-12

FINE ARTS

Visual Arts
4000 Introduction to Two-Dimensional Art Semester 1 9-12
4002 Introduction to Three-Dimensional Art Semester 2 9-12
4040 Ceramics I & II Semester 10-12
4044 Sculpture I & II Semester 10-12
4066 Printmaking I & II Semester 10-12
4062 Photography I & II Semester 10-12
4060 Drawing I & II Semester 10-12
4064 Painting I & II Semester 10-12
4086 Visual Communication / VISC 115 & 102 Year Dual Credit 10-12
4025 AP Art History Year Weighted 11-12
4004 Advanced Two-Dimensional Art Semester 1 11-12
4006 Advanced Three-Dimensional Art Semester 2 11-12

Music
4170 Advanced Concert Band Year 9-12
4162 Percussion Ensemble Year 9-12
4182 Beginning Chorus (Concert Choir) Year 9-12
4186 Intermediate Chorus (Girls Choir) Year 9-12
4188 Advanced Chorus (ND Singers) Year 9-12
4200 Applied Music Semester 9-12
4206 Music History and Appreciation Semester 9-12
4210 AP Music Theory Year Weighted 11-12

HEALTH AND PHYSICAL EDUCATION
3542 Physical Education I Semester 1 9
3544 Physical Education II Semester 2 9
3506 Health and Wellness Education Semester 10
3500 Advanced Health Education Semester 10-12
3508 Current Health Issues Semester 10-12
3560 Elective Physical Education - Conditioning Year 10-12
3560 Elective Physical Education - Team Sports Year 10-12

MATHEMATICS
2516 Algebra I Lab Year 9-12
2520 Algebra I Year 9-12
2532 Geometry Year 9-12
2531 Math 10 Year 10-12
2522 Algebra II Year 10-12
2560 Mathematics Lab Year 10-12
2530 Finite Mathematics / MATH 135 Year Dual Credit 11-12
2564 Pre-Calculus / MATH 136 Semester 1 Dual Credit 11-12
2566 Trigonometry / MATH 137 Semester 2 Dual Credit 11-12
2562 AP Calculus AB / MATH 211 Year DC/Weighted 12
2546 Probability & Statistics Semester 11-12
2550 Quantitative Reasoning Semester 11-12
2514 CCR Bridge: Math Ready Year 12

MULTIDISCIPLINARY
0520 Peer Tutoring Semester 10-12
0532 College-Entrance Preparation Semester 10-12
5974 Work-Based Learning Year 12
### SCIENCE / PLTW BIOMEDICAL SCIENCES

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<th>Course Title</th>
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<td>3024</td>
<td>Biology I</td>
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<tr>
<td>3108</td>
<td>Integrated Chemistry-Physics</td>
<td>Year 9-12</td>
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<td>3064</td>
<td>Chemistry I</td>
<td>Year 10-12</td>
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<td>3084</td>
<td>Physics I</td>
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<td>3060</td>
<td>AP Chemistry</td>
<td>Year 11-12</td>
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<tr>
<td>3081</td>
<td>AP Physics I</td>
<td>Year 11-12</td>
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<td>3020</td>
<td>AP Biology</td>
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<tr>
<td>5276</td>
<td>Anatomy and Physiology</td>
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<td>3010</td>
<td>Environmental Science</td>
<td>Year 11-12</td>
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<td>5218</td>
<td>PLTW Principles of the Biomedical Sciences</td>
<td>Year 1 SDHS 9-12</td>
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<td>5216</td>
<td>PLTW Human Body Systems</td>
<td>Year 2 SDHS 10-12</td>
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<tr>
<td>5217</td>
<td>PLTW Medical Interventions</td>
<td>Year 3 SDHS/Weighted 11-12</td>
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<tr>
<td>5219</td>
<td>PLTW Biomedical Innovations</td>
<td>Year 4 SDHS/Weighted 12</td>
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### SOCIAL STUDIES

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<tr>
<td>1548</td>
<td>World History and Civilization</td>
<td>Year 9-10</td>
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<tr>
<td>1518</td>
<td>Indiana Studies</td>
<td>Semester 9-12</td>
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<tr>
<td>1516</td>
<td>Ethnic Studies</td>
<td>Semester 9-12</td>
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<tr>
<td>1542</td>
<td>United States History</td>
<td>Year 11</td>
</tr>
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<td>1562</td>
<td>AP United States History</td>
<td>Year Weighted 11</td>
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<tr>
<td>1532</td>
<td>Psychology</td>
<td>Semester 11-12</td>
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<tr>
<td>1534</td>
<td>Sociology</td>
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<tr>
<td>1514</td>
<td>Economics</td>
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<td>1564</td>
<td>AP Macroeconomics</td>
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### WORLD LANGUAGES

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<td>2122</td>
<td>Spanish II</td>
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<tr>
<td>2124</td>
<td>Spanish III / SPAN 101 &amp; 102</td>
<td>Year Dual Credit 10-12</td>
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<td>2126</td>
<td>Spanish IV / SPAN 201 &amp; 202</td>
<td>Year DC/Weighted 11-12</td>
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<tr>
<td>2128</td>
<td>Spanish V</td>
<td>Year 12</td>
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C4 COLUMBUS AREA CAREER CONNECTION

Communications
5550 Graphic Design & Layout
5572 Graphic Imaging Technology
5530 3-D Computer Animation & Visualization
5232 Interactive Media
5986 Radio & Television I
5992 Radio & Television II

Computer Technology
5234 Networking I
5257 Networking II: Infrastructure
4588 Networking II: Servers

Construction Engineering Technology
5640 Architectural Drafting & Design I
5652 Architectural Drafting & Design II
5580 Construction Trades I
5578 Construction Trades II
4830 Construction Trades: Electrical I
4832 Construction Trades: Electrical II

Engineering Manufacturing Technology
5610 Industrial Automation & Robotics I
5612 Industrial Automation & Robotics II
5684 Electronics & Computer Technology I
5694 Electronics & Computer Technology II
4836 Mechanical Drafting & Design I
4838 Mechanical Drafting & Design II
5782 Precision Machining I
5784 Precision Machining II
5776 Welding Technology I
5778 Welding Technology II

Health Sciences
5203 Dental Careers I
5204 Dental Careers II
5282 Health Science Ed I: Nursing
5284 Health Science Ed II: Nursing
5211 Veterinary Careers I
5212 Veterinary Careers II

Human Services
5412 Early Childhood Education I
5406 Early Childhood Education II
5408 Education Professions I
5404 Education Professions II
5802 Cosmetology I
5806 Cosmetology II
5440 Culinary Arts & Hospitality I
5346 Culinary Arts & Hospitality II: CA
5458 Culinary Arts & Hospitality II: HM

Protective Services
5822 Criminal Justice I
5824 Criminal Justice II

Transportation
5510 Auto Services Technology I
5546 Auto Services Technology II

C4 Industry-Recognized Certifications

Automotive I  ASE Engine Repair, ASE Steering & Suspension
Automotive II  ASE Brakes, ASE Electrical
Cosmetology  Indiana State Board of Cosmetology
Construction I  NCCER Core
Construction II  NCCER Carpentry I
Culinary Arts I  ProStart National Certificate of Achievement
Culinary Arts II  ProStart National Certificate of Achievement, ServSafe Food Manager
Early Childhood Education I & II  Child Development Associate (CDA)
Welding I & II  AWS SENSE

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CAREER CLUSTER: AGRICULTURE

SUPERVISED AGRICULTURAL EXPERIENCE
5228

Supervised Agricultural Experience (SAE) is designed to provide students with opportunities to gain experience in the agricultural field(s) in which they are interested. Students experience and apply what is learned in the classroom, laboratory, and training site to real-life situations. Students work closely with their agricultural science and business teacher(s), parents, and/or employers to get the most out of their SAE program. Curriculum content and competencies are varied so that agricultural experiences are not duplicated. This course is only offered during the summer at North Decatur and may be taken every summer until graduation.

INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES
5008

Introduction to Agriculture, Food, and Natural Resources is a two-semester course that is highly recommended as a prerequisite to, and a foundation for, all other agricultural classes. The nature of this course is to provide students with an introduction to the fundamentals of agricultural science and business. Topics to be covered include: animal science; plant and soil science; food science; horticultural science; agricultural business management; landscape management; natural resources; agriculture power, structure, and technology; leadership development; supervised agricultural experience; and career opportunities in the areas of agriculture, food, and natural resources. Students are encouraged, but not required, to join and participate with the North Decatur FFA Chapter.

ANIMAL SCIENCE / AGRI 103 (IVY TECH)
5017

Animal Science is a two-semester course that provides students with an overview of the field of animal science. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study can be applied to both large and small animals. Topics to be addressed include: anatomy and physiology, genetics, reproduction, nutrition, common diseases and parasites, and the care and maintenance of both livestock and companion animals, while incorporating leadership development, supervised agricultural experience, and learning about career opportunities in the area of animal science. This course fulfills a science requirement.

PLANT AND SOIL SCIENCE / AGRI 105 (IVY TECH)
5170

Plant and Soil Science is a two-semester course that provides students with opportunities to participate in a variety of activities which include laboratory work. The following topics are found in this course: plant taxonomy, components and their functions, plant growth, reproduction and propagation, photosynthesis and respiration, environmental factors affecting plant growth, management of plant diseases and pests, biotechnology, the basic components and types of soil, calculation of fertilizer application rates and procedures for application, soil tillage and conservation, irrigation and drainage, land measurement, cropping systems, precision agriculture, principles and benefits of global positioning systems, and harvesting. Leadership development, supervised agricultural experience, and career exploration opportunities in the field of plant and soil science are also included. This course fulfills a science requirement.

NATURAL RESOURCES / AGRI 115 (IVY TECH)
5180

Natural Resources is a first-semester course that provides students with a foundation in natural resources. Hands-on learning activities, in addition to leadership development, supervised agricultural experience, and career exploration, encourage students to investigate areas of environmental concern. Students are introduced to the following areas of natural resources: soils, the water cycle, air quality, outdoor recreation, forestry, rangelands, wetlands, animal wildlife, hunting, and safety. This course fulfills a science requirement.

HORTICULTURAL SCIENCE / AGRI 116 (IVY TECH)
5132

Horticultural Science is a second-semester course designed to give students a background in the field of horticulture and its many career opportunities. It addresses the biology and technology involved in the production, processing, and marketing of plants and their products. Topics covered include: reproduction and propagation of...
plants, plant growth, growth media, management practices for field and greenhouse production, marketing concepts, production of plants of local interest, and pest management. Students participate in a variety of activities to include extensive laboratory work (usually in a school greenhouse), leadership development, supervised agricultural experience, and learning about career opportunities in the area of horticultural science. This course fulfills a science requirement for the General Diploma only.

**AGRICULTURE POWER, STRUCTURE, AND TECHNOLOGY I / AGRI 106 (IVY TECH)**

5088  
*Agriculture Power, Structure, and Technology I* (formerly Ag Mechanics I) is a two-semester, lab intensive course in which students develop an understanding of basic principles of selection, operation, maintenance, and management of agricultural equipment. Topics covered include: safety, electricity, plumbing, concrete, carpentry, leadership development, supervised agricultural experience, and career opportunities in the area of agriculture power, structure, and technology.

**AGRICULTURE POWER, STRUCTURE, AND TECHNOLOGY II / AGRI 106 (IVY TECH)**

5088  
*Agriculture Power, Structure, and Technology II* (formerly Ag Mechanics II) is a two-semester, lab intensive course in which students develop an understanding of basic principles of metal technology and engines. Topics covered include: arc welding, MIG welding, oxy-acetylene welding, brazing and soldering, aluminum welding, cutting torches, multi-cylinder engines, leadership development, supervised agricultural experience, and career opportunities in the area of agriculture power, structure, and technology.

**LANDSCAPE MANAGEMENT I / AGRI 164 (IVY TECH)**

5136  
*Landscape Management I* is a two-semester course that provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures of landscape construction, the determination of maintenance schedules, communication and management skills necessary in landscape operations, and the care and use of equipment utilized by landscapers. Students will also participate in leadership development, supervised agricultural experience, and career exploration activities in the area of landscape management. This course qualifies as a quantitative reasoning course.

**AGRIBUSINESS MANAGEMENT / AGRI 102 (IVY TECH)**

5002  
*Agribusiness Management* provides foundational concepts in agricultural business and economics. It is a two-semester course that introduces students to the principles of agribusiness organization and farm management. Concepts covered in the course include: food and fiber production and marketing, forms of agribusiness and farm organization, finance, marketing, sales, leadership development, supervised agricultural experience, and career opportunities in the area of agribusiness and farm management. This course qualifies as a quantitative reasoning course.

**ADVANCED LIFE SCIENCE, ANIMALS / AGRI 107 (IVY TECH)**

5070  
*Advanced Life Science, Animals* is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Through instruction, including laboratory, fieldwork, leadership development, supervised agricultural experience, and the exploration of career opportunities, they will recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and historical and current issues in animal agriculture in the area of advanced life science, animals. Students should complete both Biology I and Chemistry I before enrolling in this course. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.

**ADVANCED LIFE SCIENCE, PLANTS AND SOILS / AGRI 109 (IVY TECH)**

5074  
*Advanced Life Science, Plants and Soils* is a two-semester course that provides students with opportunities to participate in a variety of activities which include laboratory work. Students study concepts, principles, and theories associated with plants and soils. Students recognize how plants are classified, grown, function, and reproduce. Students explore plant genetics and the use of plants by humans. They examine plant evolution and

*NDHS Scheduling Guide 25*
the role of plants in ecology. Students investigate, through laboratory and fieldwork, how plants function and the influence of soil in plant life. **Students should complete both Biology I and Chemistry I before enrolling in this course.** This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.

**CAREER CLUSTER: BUSINESS, MARKETING, & ENTREPRENEURSHIP**

**INTRODUCTION TO BUSINESS / BUSN 101 (IVY TECH)**  
4518  
Dual Credit  
9-12  
*Introduction to Business* 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 develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

**INTRODUCTION TO ACCOUNTING**  
4524  
10-12  
*Introduction to 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.

**CAREER CLUSTER: INFORMATION TECHNOLOGY**

**DIGITAL APPLICATIONS AND RESPONSIBILITY / CINS 101 (IVY TECH)**  
4528  
Dual Credit Course  
9-12  
*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.

**CAREER CLUSTER: CTE**

**PREPARING FOR COLLEGE AND CAREERS**  
5394  
10  
*Preparing for College and Careers* addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today’s choices on tomorrow’s possibilities. Topics to be addressed include twenty-first century life and career skills; higher-order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana’s College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project-based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences is incorporated.

**PERSONAL FINANCIAL RESPONSIBILITY**  
4540  
10-12  
*Personal Financial Responsibility* 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; analyzing personal standards, needs, wants, and goals; identifying sources of income, saving, and investing; understanding banking, budgeting, and record-keeping; and managing risk, insurance, and credit card debt. A project-based approach and applications through authentic settings such as
work-based observations and service learning experiences are appropriate. Direct, concrete applications of mathematical proficiencies in projects are encouraged. This course qualifies as a quantitative reasoning course.

CAREER CLUSTER: STEM

PLTW INTRODUCTION TO ENGINEERING DESIGN / DESN 101 & 113 (IVY TECH)  
4812 Dual Credit Course 9-12  
PLTW Introduction to Engineering Design is a year-long introductory course which develops student problem-solving skills using the design process. Students document the progress of their solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2-D and 3-D drawing techniques and incorporate computer-aided design (CAD) in the development of their solutions. Students who have successfully completed Algebra I or who have earned a passing score on their 8th grade ISTEP+ Math are recommended for this course.

PLTW PRINCIPLES OF ENGINEERING / DESN 104 (IVY TECH)  
4814 Dual Credit Course 10-12  
PLTW Principles of Engineering is a year-long course that focuses on the process of applying engineering, technological, scientific, and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to allow students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.

PLTW DIGITAL ELECTRONICS / EECT 112 (IVY TECH)  
4826 Dual Credit and Weighted Course 11-12  
PLTW Digital Electronics is a year-long course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles, as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities will provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry. Software will be used to develop and evaluate the product design. This course engages students in critical thinking and problem-solving skills, time management, and teamwork skills. This course qualifies as a quantitative reasoning course. Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course.

PLTW CIVIL ENGINEERING AND ARCHITECTURE / DESN 105 (IVY TECH)  
4820 Dual Credit and Weighted Course 11-12  
PLTW Civil Engineering and Architecture is a year-long course that introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs will allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis will be placed on related transportation, water resource, and environmental issues. Activities will include the preparation of cost estimates, as well as a review of regulatory procedures that would affect the project design. This course qualifies as a quantitative reasoning course.

PLTW INTRODUCTION TO COMPUTER SCIENCE  
4803  
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.
PLTW Computer Science: Cybersecurity

Computer Science: Cybersecurity introduces the secure software development process including designing secure applications, writing secure code designed to withstand various 69 Indiana Department of Education High School Course Titles and Descriptions 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. Students will learn the foundations of cryptography using simple mathematical probability. Information theory, computational complexity, number theory, and algebraic approaches will be covered. Schools may use the PLTW curriculum to meet the standards for this course. Schools using the curriculum and are part of the Project Lead the Way network must follow all training and data collection requirements. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.

ENGLISH / LANGUAGE ARTS

ENGLISH 9

1002

English 9, an integrated English course, 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 persuasive compositions, and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH 10

1004

English 10, an integrated English course, 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 persuasive compositions, and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH 11

1006

English 11, an integrated English course, is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes and 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 fictional narratives, short stories, responses to literature, 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.

AMERICAN LITERATURE

1020

American Literature is an honors study of representative works and authors of the United States from pre-Revolutionary times to the present. Students read, analyze, evaluate, critique, and actively respond to a wide variety of literary genres that reflect American culture, including quality works of various ethnic and cultural minorities. Students compare readings and media from literature, history, and other subjects by demonstrating
how the ideas and concepts presented in the works are interconnected, distinctly American, and important to an understanding of the development of the current culture.

**COMPOSITION**

1090

Composition is an honors study and application of the rhetorical (effective) writing strategies of narration, description, exposition, and persuasion. 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. Students read classic and contemporary literature or articles and use appropriate works as models for writing. Students write a variety of types of compositions with a focus on fictional narratives, reflective compositions, academic essays, and responses to literature.

**ENGLISH 12**

1008

English 12, an integrated English course, 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 fictional narratives, short stories, responses to literature, 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.

**ENGLISH 12 / ENGL 111 & 215 (IVY TECH)**

1008

Dual Credit and Weighted Course

English 12 / ENGL 111 is an honors English course integrating the standards and skills of English 12 with the concepts taught in Ivy Tech’s English Composition (ENGL 111) course. Designed to develop students’ abilities to think, organize, and express their ideas clearly and effectively in writing, this course incorporates reading, research, and critical thinking. Emphasis is placed on the various forms of expository writing such as process, description, narration, comparison, analysis, persuasion, and argumentation. A research paper is required. Numerous in-class writing activities are also required, in addition to extended essays written outside of class. Students must meet prerequisite testing scores in reading and writing to qualify for the dual credit in this course.

**FILM LITERATURE**

1034

Film Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

**STUDENT MEDIA (Newspaper/Yearbook)**

1086

Student Media is a course in the study of journalism. Students demonstrate their ability to do journalistic writing and design for high school media, including school newspapers and yearbooks, and a variety of media formats. Students follow the ethical principles and legal boundaries that guide scholastic journalism. Students express themselves publicly with meaning and clarity for the purpose of informing, entertaining, or persuading. Students work on high school media staff so that they may prepare themselves for career paths in journalism, communications, writing, or related fields. This course fulfills the fine arts requirement for the Academic Honors Diploma. Selling ads for both the newspaper and yearbook are required.
Advanced Speech and Communication is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multi-media presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. **2.6 GPA required to earn dual credit.**

**LANGUAGE ARTS LAB**

Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing language arts course work and attaining a passing score on the language arts portion of the graduation exam. It is designed for students who need additional support in all the language arts (reading, writing, speaking, and listening).

**CAREER CLUSTER: FAMILY AND CONSUMER SCIENCES/CTE**

*Under Indiana Code 511 IAC 6-7.1-4, taking any three (3) of the following family and consumer science courses may substitute for the one (1) health and wellness credit required by all diploma types:*

- Child Development
- Adult Roles & Responsibilities
- Human Development and Wellness
- Interpersonal Relationships
- Nutrition and Wellness
- Preparing for College and Careers

**Adult Roles & Responsibilities**

Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment, and as a career sequence course for students with an interest in family and community services, personal and family finance, and similar areas. This course builds knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today’s society. The course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family resource management, and financial responsibility and resources. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of adult roles and responsibilities. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to individual and family life.

**INTERPERSONAL RELATIONSHIPS**

Interpersonal Relationships is an introductory course that is especially relevant for students interested in careers that involve interacting with people. It is also valuable for all students as a life foundation and academic enrichment. This course addresses knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course topics include communication skills; leadership, teamwork, and collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships. A project-based approach that utilizes higher-order thinking, communication, leadership, and management processes, and fundamentals to college and career success is incorporated in order to integrate these topics into the study of interpersonal relationships. Direct, concrete language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education for all career areas that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, and the general public.
**HUMAN DEVELOPMENT AND WELLNESS / HLHS 111 (IVY TECH)**

5366

*Human Development and Wellness* is valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers impacted by individuals’ physical, social, emotional, and moral development and wellness across the lifespan. Major topics include principles of human development and wellness, impacts of family on human development and wellness, factors that affect human development and wellness, practices that promote human development and wellness, managing resources and services related to human development and wellness, and career exploration in human development and wellness. Life events and contemporary issues addressed in this course include, but are not limited to, change, stress, abuse, personal safety, and relationships among lifestyle choices; health and wellness conditions; and diseases. A project-based approach that utilizes higher-order thinking, communication, leadership, and management processes is incorporated in order to integrate the study of these topics. Authentic applications through service learning are encouraged. This course provides the foundation for continuing and post-secondary education in all career areas. **Students must meet prerequisite testing scores in reading and writing to qualify for the dual credit in this course.**

**NUTRITION AND WELLNESS**

5342

*Nutrition and Wellness* is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher-order thinking, communication, leadership, management processes, and fundamentals to college and career success is incorporated in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

**ADVANCED NUTRITION AND WELLNESS**

5340

*Advanced Nutrition and Wellness* is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. *Advanced Nutrition and Wellness* is an especially appropriate course for students interested in careers in the medical field, athletic training, and dietetics. This course builds on the foundation established in *Nutrition and Wellness*, which is a required prerequisite. This is a project-based course utilizing higher-order thinking, communication, leadership, and management processes. Topics include extensive study of major nutrients, nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills. Attention will be given to nutrition, food safety, and sanitation. This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

**CHILD DEVELOPMENT**

5362

*Child Development* is an introductory course that is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception through age three. It includes the study of prenatal development and birth, growth and development of children, child care-giving and nurturing, and support systems for parents and caregivers. A project-based approach that utilizes higher-order thinking, communication, leadership, management processes, and fundamentals to college and career success is incorporated in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.
ADVANCED CHILD DEVELOPMENT

Advanced Child Development is for those students interested in life foundations, academic enrichment, and/or careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from age four through age eight (grade 3). It builds on the Child Development course, which is a prerequisite. Advanced Child Development includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. A project-based approach that utilizes higher-order thinking, communication, leadership, management, and fundamentals to college and career success is incorporated in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning, introductory laboratory/field experiences with children in preschool and early elementary school settings, and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

ADVANCED LIFE SCIENCE, FOODS

Advanced Life Science, Foods is a course that provides students with opportunities to participate in a variety of activities including laboratory work. This is a standards-based, interdisciplinary science course that integrates biology, chemistry, and microbiology in the context of foods and the global food industry. Students enrolled in this course formulate, design, and carry out food-based laboratory and field investigations as an essential course component. Students understand how biology, chemistry, and physics principles apply to the composition of foods, the nutrition of foods, food and food product development, food processing, food safety and sanitation, food packaging, and food storage. Students completing this course will be able to apply the principles of scientific inquiry to solve problems related to biology, physics, and chemistry in the context of highly advanced industry applications of foods. Students should complete both Biology I and Chemistry I before enrolling in this course. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.

FINE ARTS

Visual Arts Courses

INTRODUCTION TO TWO-DIMENSIONAL ART

Introduction to Two-Dimensional Art is a semester one course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

INTRODUCTION TO THREE-DIMENSIONAL ART

Introduction to Three-Dimensional Art is a semester two course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.
**DRAWING**

4060

*Drawing* is a course based on the Indiana Academic Standards for Visual Art. Students in drawing engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios and identify art-related careers. **Prerequisite: Intro to 2-D/3-D Art.**

**PAINTING**

4064

*Painting* is a course based on the Indiana Academic Standards for Visual Art. Students taking painting engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create abstract and realistic paintings using a variety of materials such as mixed media, watercolor, oil, and acrylics, as well as techniques such as stippling, gouache, wash, and impasto. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios and identify art-related careers. **Prerequisite: Intro to 2-D/3-D Art.**

**VISUAL COMMUNICATION / VISC 115 & 102 (IVY TECH)**

4086

*Visual Communication* is a course based on the Indiana Academic Standards for Visual Art. Students in visual communication engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. They create print media utilizing graphic design, typography, illustration, and image creation with digital tools and computer technology. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios and identify art-related careers. **Students must meet prerequisite testing scores in reading and writing to qualify for the dual credit in this course.**

**AP ART HISTORY**

4025

*AP Art History* is a course based on the content established by the College Board. It is designed to provide the same benefits to high school students as those provided by an introductory college course in art history: an understanding and knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. Students examine major forms of artistic expression from the past and the present from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to analyze what they see. This course incorporates research, extensive reading, and analytical writing. **Parental permission is required to enroll in this course. It is required that students complete World History and Civilization with at least a “C+” before enrolling. Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.**

**ADVANCED TWO-DIMENSIONAL ART**

4004

*Advanced Two-Dimensional Art* is a semester one course for advanced students based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources. **Students must pass Intro to 2-D/3-D Art, Drawing,**

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and Painting or be recommended by the teacher before enrolling in this course. Independent work will be required.

**ADVANCED THREE-DIMENSIONAL ART**

4006

Advanced Three-Dimensional Art is a semester two course for advanced students based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Three-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create three-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources. **Students must pass Intro to 2-D/3-D Art or be recommended by the teacher before enrolling in this course. Independent work will be required.**

**CERAMICS**

4040

Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

**SCULPTURE**

4044

Sculpture is a course based on the Indiana Academic Standards for Visual Art. Students in sculpture engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Using materials such as plaster, clay, metal, paper, wax, and plastic, students create portfolio quality work. Students at this level produce works for their portfolios that demonstrate a sincere desire to explore a variety of ideas and problems. They create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

**PHOTOGRAPHY**

4062

Photography is a course based on the Indiana Academic Standards for Visual Art. Students in photography engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works, creating photographs, films, and videos utilizing a variety of digital tools and darkroom processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

**PRINTMAKING**

4066

Printmaking is a course based on the Indiana Academic Standards for Visual Art. Students in printmaking engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production that lead to the creation of portfolio quality works. Students apply media, techniques, and processes with sufficient skill to communicate intended meaning. They create abstract and realistic prints using a variety of materials such as linocut, woodcut, stencil, silkscreen, photo silkscreen, and mono-print. They utilize processes such as etching, relief, and lithography to explore a variety of ideas and problems. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about
artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills.

**Music Courses**

**ADVANCED CONCERT BAND**

4170  
**Advanced Concert Band** is based on the Indiana Academic Standards for High School Instrumental Music. This course provides students with a balanced comprehensive study of music through the concert band which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for 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 of the school day that support and extend learning in the classroom.**

**PERCUSSION ENSEMBLE**

4162  
**Percussion Ensemble** is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of percussion ensemble and solo literature, which develops skills in the psychomotor, cognitive and affective domains. Students develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature as pertaining to percussion ensemble and solo literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. **Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.**

**BEGINNING CHORUS (Concert Choir)**

4182  
**Beginning Chorus** is based on the Indiana Academic Standards for High School Choral Music. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for 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 of the school day that support and extend learning in the classroom.**

**INTERMEDIATE CHORUS (Girls Choir)**

4186  
**Intermediate Chorus** is based on the Indiana Academic Standards for High School Choral Music. Students taking Intermediate Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for 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 of the school day that support and extend learning in the classroom.**

**ADVANCED CHORUS (ND Singers)**

4188  
**Advanced Chorus** is based on the Indiana Academic Standards for High School Choral Music. Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. This
class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A number of public performances may serve as a culmination of daily rehearsal and musical goals. This is a course open to students by audition only. **Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.**

**APPLIED MUSIC**

4200

*Applied Music* is based on the Indiana Academic Standards for High School Instrumental and Choral Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to instrumental and choral music.

**MUSIC HISTORY AND APPRECIATION**

4206

*Musical History and Appreciation* is based on the Indiana Academic Standards for Music. Students receive instruction designed to explore music and major musical styles and periods through understanding music in relation to both Western and non-Western history and culture. Activities include analyzing and describing music, evaluating music and music performances, and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

**AP MUSIC THEORY**

4210

*AP Music Theory* is a course based on the content established by the College Board. It is intended for high school students who have completed music studies comparable to a first-year college course in music theory. The guidelines for the course that are published by The College Board may not match any particular college program, but they do reflect the coverage of content and level of skills typical of most first-year college courses. This course integrates aspects of melody, harmony, texture, rhythm, form, musical analysis, elementary composition, history, and style. The student's ability to read and write musical notation is fundamental to this course, and it is also assumed that the student has acquired at least basic performance skills in voice or on an instrument. **Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.**

**HEALTH AND PHYSICAL EDUCATION**

**PHYSICAL EDUCATION I**

3542

*Physical Education I* is a first-semester course which focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports, dual sport activities, individual physical activities, outdoor pursuits, self-defense and martial arts, weight-lifting, fitness challenges, and aerobics/dance, all of which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP's and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). Adapted physical education must be offered, as needed, in the least restrictive environment and must be based upon an individual assessment.

**PHYSICAL EDUCATION II**

3544

*Physical Education II* is a second-semester course which focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following that were not in Physical Education I: team sports, dual sport activities, individual physical activities, outdoor pursuits, self-defense and martial arts, weight-lifting, fitness challenges, and
aerobics/dance, all of which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP’s and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). Adapted physical education must be offered, as needed, in the least restrictive environment and must be based upon an individual assessment.

HEALTH AND WELLNESS EDUCATION

3506
*Health & Wellness* is a course which provides the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student’s ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Through a variety of instructional strategies, students practice the development of functional health information (essential concepts); determine personal values that support healthy behaviors; develop group norms that value a healthy lifestyle; and develop the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. This course includes the application of priority areas in a planned, sequential, comprehensive health education curriculum. Priority areas include: promoting personal health and wellness; physical activity; healthy eating; promoting safety and preventing unintentional injury and violence; promoting mental and emotional health; a tobacco-free, alcohol-free, and other drug-free lifestyle; and promoting human development and family health. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, accessing information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

ELECTIVE PHYSICAL EDUCATION - CONDITIONING

3560
*Elective Physical Education* - Conditioning is a course which identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. This course provides an opportunity for an in-depth study in weight-lifting. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of strength and conditioning. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP’s and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). Adapted physical education must be offered, as needed, in the least restrictive environment and must be based upon an individual assessment.

ELECTIVE PHYSICAL EDUCATION - TEAM SPORTS

3560
*Elective Physical Education* - Team Sports is a course which identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. This course promotes lifetime sport and recreational activities. It includes the study of physical development concepts and principles of sport and exercise, as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEP’s and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). Adapted physical education must be offered, as needed, in the least restrictive environment and must be based upon an individual assessment.

MATHEMATICS

ALGEBRA I LAB

2516
*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. This course is designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year. This course fulfills a mathematics requirement for the General Diploma only.

ALGEBRA I

2520
Algebra I formalizes and extends the mathematics students learned in the middle grades. Five critical areas comprise Algebra I: relations and functions, linear equations and inequalities, quadratic and nonlinear equations, systems of equations and inequalities, and polynomial expressions. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content 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. Students who do not pass both semesters of Algebra I with a C- or better will be required to take both Algebra I and Math 10 the following year.

GEOMETRY

2532
Geometry formalizes and extends students’ geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Six critical areas comprise the Geometry course: congruency and similarity, measurement, analytic geometry, circles, and polyhedra. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school INCC. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

MATH 10

2531
Math 10 is a new two-semester course designed to reinforce and elevate the Algebra I and 7th and 8th grade Geometry knowledge and skills necessary for students to successfully complete high school mathematics courses 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 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 with frequent pre- and post-assessment data analyzed to drive instructional design and delivery. Students who do not pass both semesters of Algebra I with a C- or better will be required to take both Algebra I and Math 10 the following year. This course fulfills a mathematics requirement for the General Diploma only.

ALGEBRA II

2522
Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content 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.

MATHEMATICS LAB

2560
Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework and attaining a passing score on the math portion of the graduation exam. It is recommended that Mathematics Lab be 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.
Finite Mathematics is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Mathematics is made up of five strands: sets, matrices, networks, optimization, and probability. The eight process strands 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. Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course.

**PRE-CALCULUS / MATH 136 (IVY TECH)**

Pre-Calculus extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to higher-level sequences and series. This first-semester course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus is made up of five strands: polar coordinates and complex numbers; functions; quadratic, polynomial, and rational equations and functions; exponential and logarithmic equations and functions; and parametric equations. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such, it is designed to provide students with strong foundations for calculus and other higher-level math courses. 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. Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course.

**TRIGONOMETRY / MATH 137 (IVY TECH)**

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. This second-semester course provides the foundation for common periodic functions that are encountered in many disciplines including music, engineering, medicine, and finance (and nearly all other STEM disciplines). Trigonometry consists of seven strands: conics, unit circles, geometry, periodic functions, identities, polar coordinates, and vectors. Students will also advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. 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. Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course.

**AP CALCULUS AB / MATH 211 (IVY TECH)**

AP Calculus AB is a course based on content established by the College Board. It is primarily concerned with developing the student’s understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Topics include: functions, graphs, and limits; derivatives; and integrals. Technology should be used regularly by students and teachers to reinforce the relationships among the multiple representations of functions, to confirm written work, to implement experimentation, and to assist in interpreting results. Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course. Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.

**CCR BRIDGE: MATH READY**

CCR Bridge: Math Ready will include and reinforce the Algebra I, Geometry, Algebra II and Statistics skills necessary to be ready for an entry-level college math course. This course emphasizes understanding of math concepts rather than just memorizing procedures. CCR Bridge: Math Ready students learn the context behind the
procedure: why to use a certain formula or method to solve a problem, for example. This equips them with higher-order thinking skills in order to apply math skills, functions and concepts in different situations. The course is intended for students who currently have achieved the minimum math requirements for college entry. The content of this course is designed to enhance students’ math skills so that they are ready for college-level math assignments. It is not designed to prepare students for college-level math in STEM majors.

### MULTIDISCIPLINARY

#### BASIC SKILLS DEVELOPMENT

**0500**  
*Basic Skills Development* is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, which are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on Indiana’s standards, individual school corporation general curriculum plans, and the student’s Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

#### PEER TUTORING

**0520**  
*Peer Tutoring* provides high school students with an organized exploratory experience to assist special needs students in grades seven through twelve (7-12), through a helping relationship, with their studies and personal growth and development. The course provides opportunities for students to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are pre-planned by a special education teacher at North Decatur. 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.

### SCIENCE

#### BIOLOGY I

**3024**  
*Biology I* is a course based on the following core topics: cellular chemistry, structure and reproduction, matter cycles and energy transfer, interdependence of organisms, molecular basis of heredity, genetics, and evolution. Instruction will focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures.

#### INTEGRATED CHEMISTRY-PHYSICS

**3108**  
*Integrated Chemistry-Physics* is a course focused on the following core topics: motion and energy of macroscopic objects; chemical, electrical, mechanical, and nuclear energy; properties of matter; transport of energy; magnetism; and energy production and its relationship to the environment and economy. Instruction will focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures. **This course qualifies as a quantitative reasoning course.**

#### CHEMISTRY I

**3064**  
*Chemistry I* is a course based on the following core topics: properties and states of matter, atomic structure, bonding, chemical reactions, solution chemistry, behavior of gases, and organic chemistry. Students enrolled in this course compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction will focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations.
according to accepted procedures. Students must pass Biology I and Algebra I prior to enrolling in this course. This course qualifies as a quantitative reasoning course.

**PHYSICS I**

3084  
10-12

*Physics I* is a course focused on the following core topics: constant velocity, constant acceleration, forces, energy, linear momentum in one dimension, simple harmonic oscillating systems, mechanical waves and sound, and simple circuit analysis. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation by designing and conducting investigations guided by theory and by evaluating and communicating the results of those investigations according to accepted procedures. This course qualifies as a quantitative reasoning course.

**AP CHEMISTRY / CHEM 105 (IVY TECH)**

3060  
**Dual Credit & Weighted Course**

11-12

*AP Chemistry* is a course based on the content established by the College Board. The content includes: structure of matter (atomic theory and structure, chemical bonding, molecular models, nuclear chemistry), states of matter (gases, liquids, solids, and solutions), and reactions (reaction types, stoichiometry, equilibrium, kinetics, and thermodynamics). Students must pass Chemistry I prior to enrolling in this course. This course qualifies as a quantitative reasoning course. Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas. Students must meet prerequisite testing scores to qualify for the dual credit in this course.

**AP BIOLOGY / BIOL 105 (IVY TECH)**

3020  
**Dual Credit & Weighted Course**

11-12

*AP Biology* is a course based on the content established by the College Board. The major themes of the course include: how the process of evolution drives the diversity and unity of life; how biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; how living systems store, retrieve, transmit, and respond to information essential to life processes; how biological systems interact; and how these systems and their interactions possess complex properties. Students must pass Biology I prior to enrolling in this course. This course qualifies as a quantitative reasoning course. Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas. Students must meet prerequisite testing scores to qualify for the dual credit in this course.

**ANATOMY AND PHYSIOLOGY**

5276  
11-12

*Anatomy and Physiology* is a course in which students investigate concepts related to Health Science with emphasis on the interdependence of systems and the 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, the skeleton, and muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with human anatomy and 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.

**EARTH AND SPACE SCIENCE**

3044  
9-12

*Earth and Space Science I* is a course focused on the following core topics: universe; solar system; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth’s interconnected systems and examine how earth’s materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.
Anatomy and Physiology is a course in which students investigate concepts related to Health Science with emphasis on the interdependence of systems and the 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, the skeleton, and muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with human anatomy and 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.

PLTW Principles of the Biomedical Sciences provides an introduction to this field through “hands-on” projects and problems. 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 through 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. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses. Biology I or concurrent enrollment in Biology I is required. This course fulfills a science requirement for all diploma types. This course will be taught at South Decatur.

PLTW 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 will use appropriate software to design and build systems to monitor body functions. This course fulfills a science requirement for all diploma types. This course will be taught at South Decatur.

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. Students will also study the design and development of various interventions including vascular stents, cochlear implants, and prosthetic limbs. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. Using 3-D imaging software, students will design and build a model of a therapeutic protein. This course fulfills a science requirement for all diploma types and will be taught at South Decatur.

PLTW Biomedical Innovations is a capstone 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. They have the opportunity to work on an independent project and may work with a mentor or advisor from a
university, hospital, physician’s office, or 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. This course will be taught at South Decatur.

HEALTH SCIENCE EDUCATION: NURSING I

5282
Health Science Education I is a course designed to provide a foundation of skills development to specific health careers including; patient care, nursing care, dental care, animal care, medical laboratory, and public health. Students will also receive an introduction to healthcare systems, anatomy, physiology, and medical terminology. Laboratory experiences with industry applications are organized and planned around the activities associated with the student's career objectives. Job seeking and job maintenance skills, personal management skills, self-analysis to aid in career selection and completion of the application process for admission into a post-secondary program of their choice are also included in this course. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service. This course will be taught at South Decatur.

HEALTH SCIENCE EDUCATION: NURSING II

5284
Health Science Education II: Nursing is an extended laboratory experience designed to provide students with the opportunity to assume the role of nurse assistant. Students have the opportunity to learn, and then to practice those technical skills previously learned in the classroom at qualified clinical sites while under the direction of licensed nurses. These sites may include extended care facilities, hospitals and home health agencies. Throughout the course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels of the healthcare field; an overview of the healthcare delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in a variety of healthcare settings. Additionally, students will build their essential job related skills such as providing appropriate personal care to patients; reporting necessary information to nursing staff; operating and monitoring medical equipment; teaching and assisting patients and families with the management of their illness or injury; and performing general health screenings. This course provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA encourages the development of leadership, communication and career related skills, and opportunities for community service. This course will be taught at South Decatur. CNA Certification available in this program.

MEDICAL TERMINOLOGY

5274
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 pronunciation, 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. This course will be taught at South Decatur.

SOCIAL STUDIES

WORLD HISTORY AND CIVILIZATION

1548
World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality
and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.

INDIANA STUDIES
1518
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 students 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.

ETHNIC STUDIES
1516
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, immigration, 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.

SOCIOLOGY
1534
Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people’s attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry, students examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students also analyze the role of individuals in the community and social problems in today’s world.

PSYCHOLOGY
1532
Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas. History & Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation, and emotion. Development looks at all the changes through one’s life; physical, cognitive, as well as emotional, social, and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment looks at the approaches used to explain one’s personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes, and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the day-to-day life of a psychologist.

UNITED STATES HISTORY
1542
United States History is a course that builds upon concepts developed in previous studies of US History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant
themes and concepts in US History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

**AP UNITED STATES HISTORY**

There are no prerequisites for AP United States History. However, according to the College Board, students should be able to read a college-level textbook and write grammatically correct, complete sentences. AP US History is designed to be the equivalent of a two-semester introductory college or university US History course. The AP US History course focuses on developing students’ understanding of American History from approximately 1491 to the present. The course has students investigate the content of US History for significant events, individuals, developments, and processes in nine historical periods and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians when they study the past. The course also provides seven themes (American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society) that students explore throughout the course in order to make connections among historical developments in different times and places. **Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.**

*Note: While the College Board strongly encourages equitable access to the course, they also encourage educators to consider a student’s willingness to take the course, as well as one’s academic preparedness. To more accurately place students, criteria for admission to this AP course may include, but are not limited to, AP Potential, recommendations of English and History teachers, and standardized test results.*

**ECONOMICS**

**Economics** examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade. **This course qualifies as a quantitative reasoning course.**

**AP MACROECONOMICS**

There are no prerequisites for **AP Macroeconomics.** However, according to the College Board, students should be able to read a college-level textbook and should possess basic mathematics and graphing skills. AP Macroeconomics is a course based on the content established by the College Board. The course places particular emphasis on the study of national income and price-level determinations and also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Topics include: basic economic concepts, measurement of economic performance, national income and price determination, economic growth, and international finance, exchange rates, and balance of payments. **This course qualifies as a quantitative reasoning course. Students must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.**

*Note: While the College Board strongly encourages equitable access to the course, they also encourage educators to consider a student’s willingness to take the course, as well as one’s academic preparedness. To more accurately place students, criteria for admission to this AP course may include, but are not limited to, AP Potential, recommendations of Math teachers, and standardized test results.*

**UNITED STATES GOVERNMENT**

**United States Government** provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government’s role in world affairs will be included. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.
## WORLD LANGUAGES

### SPANISH I

**2120** | 9-12
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*Spanish I* introduces students to effective strategies for beginning Spanish language learning and to various aspects of Spanish-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understanding and using appropriate greetings and forms of address, participating in brief guided conversations on familiar topics, and writing short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products, and perspectives of Spanish-speaking culture, recognize basic routine practices of the target culture, and recognize and use situation-appropriate nonverbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

### SPANISH II

**2122** | 9-12
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*Spanish II* builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participating independently in brief conversations on familiar topics, writing cohesive passages with greater independence, and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products, and perspectives of Spanish-speaking culture, report on basic family and social practices of the target culture, and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

### SPANISH III / SPAN 101 & 102 (IVY TECH)

**2124** | 10-12
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*Spanish III* builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain, and close conversations, exchange detailed information in oral and written form, and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills such as using cognates, synonyms, and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop an understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products, and perspectives of the target culture, discussion of significant events in the target culture, and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom. **Students must meet prerequisite testing scores in reading and writing to qualify for the dual credit in this course.**

### SPANISH IV / SPAN 201 & 202 (IVY TECH)

**2126** | 11-12
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*Spanish IV* provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop an understanding of Spanish-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture, reflecting on cultural practices of the
target culture, and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Spanish language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Spanish speakers. **Students must meet prerequisite testing scores in reading and writing to qualify for the dual credit in this course.**

**SPANISH V**

2126

*Spanish V,* a course based on Indiana’s Academic Standards for World Languages, provides opportunities for students to interact and exchange information in culturally and socially authentic and/or simulated situations to demonstrate integration of language skills with understanding of Spanish-speaking culture. This course emphasizes the use of appropriate formats, varied vocabulary and complex language structures within student communication, both oral and written, as well as the opportunity to produce and present creative material using the language. Additionally, students will continue to develop understanding of Spanish-speaking culture through investigating the origin and impact of significant events and contributions unique to the target culture, comparing and contrasting elements that shape cultural identity in the target culture and the student’s own culture, and explaining how the target language and culture have impacted other communities. This course further emphasizes the integration of concepts and skills from other content areas with the target language and cultural understanding, as well as the exploration of community resources intended for native Spanish speakers.

**CAREER CLUSTER: CTE WORK-BASED LEARNING**

**WORK-BASED LEARNING**

5974

Work-based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning 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. Work-based Learning Capstone experiences occur in workplaces 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. Related Instruction, shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway; and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies. **Interested students must fill out an application for WBL in the spring of their junior year to be considered for this course.**

**C4 COURSES**

**GRAPHIC DESIGN & LAYOUT**

5550

*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. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in various printing processes as well as activities in designing product packaging and commercial displays or exhibits. **IVY TECH / VISC 102 & VISC 115 dual credit available in this program.**

**GRAPHIC IMAGING TECHNOLOGY**

5572

*Graphic Imaging Technology* will include organized learning experiences that focus on theory and laboratory activities in pre-press, press and finishing operations. Emphasis will be placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations, and finishing.

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techniques. Instructional activities will enhance students' language arts skills through the use of proofreading, spelling, and punctuation exercises. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries.

3-D COMPUTER ANIMATION & VISUALIZATION

5530
3D Computer Animation and Visualization prepares students to use computer applications and related visual and sound imaging techniques to create and manipulate images and information. The course includes instruction in three-dimensional solid model creation, sketching, and storyboarding, time and motion study, color and lighting studies, and camera positioning. Using current computer animation software that reflects industry standards, students should produce projects for commercial applications in one or more of the following areas: engineering, architectural, or industrial design; marketing; video production; internet design; electronic gaming; and, education and training.

INTERACTIVE MEDIA

5232
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." IVY TECH / VISC 105 & 115 dual credit available in this program.

RADIO & TELEVISION I

5986
Radio and Television I focuses on communication, media and production. Emphasis is placed on career opportunities, production, programming, promotion, sales, performance, and equipment operation. Students will also study the history of communication systems as well as communication ethics and law. Students will develop oral and written communication skills, acquire software and equipment operating abilities, and integrate teamwork skills. Instructional strategies may include a hands-on school-based enterprise, real and/or simulated occupational experiences, job shadowing, field trips, and internships. VU / BCST 102, 140, and 206 dual credit available in this program.

RADIO & TELEVISION II

5992
Radio and Television II prepares students for admission to television production programs at institutions of higher learning. Students train on professional equipment creating a variety of video projects. During this second-year program students integrate and build on first-year curriculum while mastering advanced concepts in production, lighting and audio.

NETWORKING I

5234
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.

NETWORKING II: INFRASTRUCTURE

4588
The OSI and TCP/IP functions and services are examined in detail. Students will learn how a router addresses remote networks and determines the best path to those networks, employing static and dynamic routing techniques.
**NETWORKING II: SERVERS**

*Networking II: Servers* focuses on the software skills needed to manage a network. Students will learn and practice the skills necessary to perform in the role of a network administrator. They will be able to accomplish fundamental network management tasks on a server such as setting up computer network services, create users and appropriate login scripts, develop groups, set the server remotely, set up security, backup/restore the server and setup/maintain clients.

**ARCHITECTURAL DRAFTING & DESIGN I**

*Architectural Drafting and Design I* gives students a basic understanding of the detailing skills commonly used by drafting technicians. Areas of study include: lettering, sketching, and the proper use of equipment. This course includes the creation and interpretation of commonly used construction documents. Methods of geometric construction, three-dimensional drawing techniques, and sketching will be taught as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing. This course also provides students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience with AutoCAD. They will be expected to complete several projects relating to command topics. **IVY TECH / DESN 101 & 113 dual credit available through this program.**

**ARCHITECTURAL DRAFTING & DESIGN II**

*Architectural Drafting and Design II* builds on the concepts of Architectural Drafting and Design I and presents a history and survey of architecture with a focus on the creative design of buildings in a studio environment. This course covers site analysis, facilities programming, space planning, conceptual design, and the proper use of materials. Students will develop presentation drawings, give oral presentations, and critique works. Generation of form and space is addressed through basic architectural theory, related architectural styles, design strategies, and a visual representation of the student's design process. This course will focus on advanced Computer Aided Design (CAD) techniques. It includes an overview of modeling, graphical manipulation, parts-structuring, and modeling strategies. Advanced CAD will enable students to make the transition from 2D drafting to 3D modeling. Various Architectural software packages and applications may be used. **IVY TECH / DESN 105 dual credit available through this program.**

**CONSTRUCTION TRADES I**

*Construction Trades I* classroom and laboratory experiences involve the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of construction, future trends and career options, reading technical drawings and transforming those drawings into physical structures are covered. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. 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. Blueprints and other professional planning documents will also be covered. 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. **IVY TECH / BCTI 100 & 101 dual credit available through this program. NCCER Certification available in this program.**

**CONSTRUCTION TRADES II**

*Construction Trades II* builds on the formation, installation, maintenance, and repair skills learned in Construction Trades 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. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing. **IVY TECH / BCTI 102 & 103 dual credit available through this program. NCCER Carpentry I Certification available in this program.**

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Construction Trades: Electrical I

Construction Trades: Electrical I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical 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, Kirchhoff’s Law, series circuits, series-parallel circuits, and other electrical concepts. Students will use the underlying scientific principles related to electricity, to complete construction projects. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies. IVY TECH / BCTI 130 dual credit available through this program.

Construction Trades: Electrical II

Construction Technology: Electrical II includes classroom and laboratory experiences in residential wiring. 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 National Electrical Code. Additionally, it presents methods and techniques for troubleshooting appliances, motors, motor controls, relay wiring, commercial wiring and industrial wiring systems. It also covers wiring methods and material selection for commercial and industrial wiring systems. Studies include mechanical installation of hardware as well as electrical design and layout. Instruction in thinking critically to analyze, synthesize, and evaluate technical problems and information will also be covered as it relates to health, safety, and welfare standards and codes as dictated by local, state or federal agencies. IVY TECH / BCTI 131 dual credit available through this program.

Industrial Automation & Robotics

Industrial Automation and Robotics I, will introduce 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. IVY TECH / ADMF 112 Automation Mechatronics Mechanical Systems, INDT 113 Basic Electricity & INDT 104 Fluid Power Basics dual credit available in this program.

Industrial Automation & Robotics II

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. IVY TECH / ADMF 122 Automation Mechatronics Electrical & Robot Systems dual credit available in this program.

Electronics & Computer Technology I

Electronics and Computer Technology I introduces students to the fundamental electronic concepts necessary for entry into an electronic and computer systems career. Classroom and laboratory experiences will allow students to begin their career preparation in the fundamental electronics concepts of Jobsite Skills, DC Basics, AC Basics, and Personal Computer Design, and will incorporate safety, technical writing, mathematical concepts, and

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customer service. IVY TECH / EECT 101 Introduction to Electronics & INDT 113 Basic Electricity dual credit available in this program.

**ELECTRONICS & COMPUTER TECHNOLOGY II**

*5694*  
Electronics and Computer Technology II provides the opportunity for students to continue with foundational electronic concepts including circuit analysis and digital electronics modules. This course focuses on applying electronic concepts to real-world solutions in the fields of: industrial technology, emerging electronic technologies, residential and commercial electronic communication, and automation. Industry certifications and additional post-secondary education are critical components of this pathway. Classroom, laboratory, and Work-based experiences in the fundamental electronics concepts of circuit analysis and digital electronics as well as one of the optional modules will incorporate safety, technical writing, mathematics, and customer service. IVY TECH / EECT 112 Digital Fundamentals dual credit available in this program.

**MECHANICAL DRAFTING & DESIGN I**

*4836*  
Mechanical Drafting and Design I provides students with a basic understanding of the detailing skills commonly used by drafting technicians. Areas of study include: lettering, sketching, proper use of equipment, geometric constructions with emphasis on orthographic (multi-view) drawings that are dimensioned and noted to ANSI standards. This course also provides a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain hands-on experience with AutoCAD. They will be expected to complete several projects relating to command topics. Topics include: 2D drawing commands, coordinate systems, editing commands, paper and model space, inquiry commands, layers, plotting, text, and basic dimensioning.

**MECHANICAL DRAFTING & DESIGN II**

*4838*  
Mechanical Drafting and Design II covers working drawings both in detailing and assembly. Topics include: fastening devices, thread symbols and nomenclature, surface texture symbols, classes of fits, and the use of parts lists, title blocks and revision blocks. This course will also focus on advanced CAD features, including fundamentals of three-dimensional modeling for design. An overview of modeling, graphical manipulation, part structuring, coordinate system, and developing strategies of modeling will also be included. Advanced CAD will enable the student to make the transition from 2D drafting to 3D modeling. Students will draw and calculate three-dimensional problems. Theory and methods include graphic developments and the relationships between points, lines and planes, curved lines and surfaces, intersections, and development. Computer software and hardware experiences, as they relate to drafting and design, will be covered.

**PRECISION MACHINING I**

*5782*  
Precision Machining I provides students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The course instructs the student in industrial safety, terminology, tools and machine tools, measurement and layout. Students will become familiar with the setup and operation of power saws, drill presses, lathes, milling machines, grinders and an introduction to CNC (computer numerically controlled) machines. VU / PMTD 110 Manufacturing Processes & PMTD 110L Manufacturing Processes Lab dual credit available in this course.

**PRECISION MACHINING II**

*5784*  
Precision Machining II is a more in-depth study of skills learned in Precision Machining I, with a stronger focus in CNC setup/operation/programming. Classroom activities will concentrate on precision set-up and inspection work as well as machine shop calculations. Students will develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. A continued focus on safety will also be included.

**WELDING TECHNOLOGY I**

*5776*  
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. **IVY TECH / WELD 100 Welding Process & WELD 108 Shielded Metal Arc Welding dual credit available in this course. AWS Sense Certificate available in this program.**

**WELDING TECHNOLOGY II**

5778

_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. **IVY TECH / WELD 109 Oxy-Fuel Gas Welding & Cutting, WELD 207 Gas Metal Arc MIG Welding, and WELD 208 Gas Tungsten Arc TIG dual credit available in this course. AWS Sense Certificate available in this program.**

**DENTAL CAREERS I**

5203

_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, basic embryology, histology, tooth morphology, charting dental surfaces, and illness are all introduced. Simulated in-school laboratories and/or extended laboratory experiences are also included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior. Leadership skills are developed and community service opportunities are provided through participation in HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level. **IVY TECH / DENT 115 Preclinical Practice I dual credit available in this course.**

**DENTAL CAREERS II**

5204

Knowledge of the administrative planning, bookkeeping, recall programs, banking, tax records, computer software, insurance, office practice and management as related to the dental office. In addition, students will practice Oral and Maxillofacial Surgery, Periodontics, Endodontics, Prosthodontics, Pediatric Dentistry, and Orthodontics. Opportunity for increased skill development in clinical support and business office procedures is routinely provided. The importance of the clinical behavior of materials and biological factors are also stressed. Leadership skills are developed and community service opportunities are provided through participation in HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level. **IVY TECH / DENT 124 Preventive Dent/Diet & Nutrition dual credit available in this course.**

**VETERINARY CAREERS I**

5211

_Veterinary Careers I_ is a lab intensive course that introduces students to animal care and veterinary medicine. Through classroom and field experiences, students will attain the necessary skills to demonstrate standard protocols that are used in veterinary careers. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA or FFA encourages development of leadership, communication, and career related skills, and opportunities for community service.

**VETERINARY CAREERS II**

5212

_Veterinary Careers II_ is an extended laboratory experience designed to provide students with the opportunity to assume the role of a veterinary assistant, and practice technical skills previously learned in the classroom; all while working at a qualified clinical site under the direction of licensed veterinarians. These sites may include animal clinics, hospitals or research laboratories. Throughout this course, students will focus on learning about the healthcare system and employment opportunities at a variety of entry levels; an overview of the healthcare
delivery systems, healthcare teams and legal and ethical considerations; and obtaining the knowledge, skills and attitudes essential for providing basic care in veterinary clinics, hospitals and other related locations. Additionally, students will learn essential job related skills that include; monitoring and caring for animals before and after surgery; maintaining and sterilizing surgical instruments; cleaning and disinfecting kennels and operating rooms; providing emergency first aid to animals; giving medication to animals; appropriate techniques for collecting specimens and performing routine lab tests; and feeding and bathing animals. This course also provides students with the knowledge, attitudes, and skills needed to make the transition from high school, to post-secondary opportunities, and to work in a variety of health science careers. Students are encouraged to focus on self-analysis to aid in their career selection. Job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a post-secondary program are also areas of focus. Participation in HOSA or FFA encourages the development of leadership, communication and career related skills, and opportunities for community service.

**EARLY CHILDHOOD EDUCATION I**

5412

*Early Childhood Education I* 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. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of suggested topics. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula, and services available to young children. 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. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences may be either school-based or "on-the-job" in community-based early childhood education centers or in a combination of the two. Dual credit agreements with post-secondary programs are encouraged. **IVY TECH / ECED 100 Intro to Early Childhood Ed & ECED 101 Health, Safety & Nutrition dual credit available in this program. Child Development Associate Certificate available in this program.**

**EARLY CHILDHOOD EDUCATION II**

5406

*Early Childhood Education II* 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. ECE II is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. 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. Intensive experiences in one or more early childhood education settings are required: a minimum total of 480 hours must be accrued in ECE I and ECE II. These experiences may be either school-based or "on-the-job" in community-based early childhood education centers, or in a combination of the two. A standards-based plan for each student guides the early childhood education experiences. Students are monitored in these experiences by the Early Childhood Education II teacher. Dual credit agreements with post-secondary programs are encouraged. **IVY TECH / ECED 105 CDA Process dual credit available in this program. Child Development Associate Certificate available in this program.**

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EDUCATION PROFESSIONS I

5408

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 required components. A standards-based plan guides the students' field experiences. IVY TECH / EDUC 101 Intro to Teaching dual credit available in this program.

EDUCATION PROFESSIONS II

5404

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. A standards-based plan guides the students' field experiences. Students are monitored in their field experiences by the Education Professions II teacher. Articulation with post-secondary programs is encouraged. IVY TECH / EDUC 230 The Exceptional Child & EDUC 233 Literacy Development Through Children’s Literature dual credit available in this program.

COSMETOLOGY I

5802

Cosmetology I offers an introduction to cosmetology with an emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, bacteriology, and sanitation. In the second semester greater emphasis is placed on the application and development of these skills. The State of Indiana requires a total of 1500 hours of instruction for licensure. VU / COSM 100 Cosmetology I & COSM 150 Cosmetology II dual credit available through this program.

COSMETOLOGY II

5806

Cosmetology II builds on concepts learned in Cosmetology I with an emphasis on the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology. VU / COSM 200 Cosmetology III & COSM 250 Cosmetology IV available through this program. State license in Cosmetology possible at the end of year 2.

CULINARY ARTS & HOSPITALITY I

5440

Culinary Arts and Hospitality I prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. Articulation with post-secondary programs is encouraged. ProStart National Certificate of Achievement available through this program.
CULINARY ARTS & HOSPITALITY II: CA
5346
Culinary Arts and Hospitality II: Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory and Work-based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with post-secondary programs is encouraged. IVY TECH / HOSP 101 Sanitation & First Aid, HOSP 102 Basic Food Theory & Skills, and HOSP 105 Introduction to Baking dual credit available in this program. ProStart National Certificate of Achievement and ServSafe Food Manager Certificate available in this program.

CULINARY ARTS & HOSPITALITY II: HOSPITALITY MANAGEMENT
5458
Culinary Arts and Hospitality II: Hospitality Management prepares students for employment in the hospitality industry. It provides the foundations for study in higher education that leads to a full spectrum of hospitality careers. This is a broad-based course that introduces students to all segments of hospitality, what it includes, and career opportunities that are available; provides a survey of management functions, highlighting basic theories and facts; and exposes students to current trends and current events within the industry. Three major goals of this course are for students to be able to: identify current trends in hotel and restaurant management, distinguish the difference between hospitality and tourism, and state differences in front of the house versus back of the house. Intensive experiences in one or more hospitality industry settings are a required component of the course. A standards-based plan for each student guides the industry experiences. Students are monitored in their industry experiences by the Advanced Hospitality Management teacher. Industry experiences may be either school-based or "on the job" in community-based hospitality settings, or in a combination of the two.

CRIMINAL JUSTICE I
5822
Criminal Justice I introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. 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. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for dual credit for students who meet post-secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. VU / LAWE 100 Survey of Criminal Justice & LAWE 150 Criminal Minds & Deviant Behavior dual credit available in this program.

CRIMINAL JUSTICE II
5824
Criminal Justice II 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. VU / LAWE 101 Basic Police Operations & LAWE 145 Ethics & Professionalism in CJ dual credit available in this program.

AUTO SERVICES TECHNOLOGY I

5510

Automotive Services Technology I is a one year course that encompasses the sub topics of the NATEF/ASE identified areas of Steering & Suspension and Braking Systems. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one year offering must meet the NATEF program certifications for the two primary areas offered in this course. This course provides the opportunity for dual credit for students who meet post-secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. Mathematical skills will be reinforced through precision measuring activities as well as cost estimation and calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors. IVY TECH / AUTI 100 Basic Automotive Services, AUTI 122 Steering & Suspension, AUTI 141 Engine Fundamentals & Repair, and AUTI 145 Driveline Services dual credit available in this program. ASE Engine Repair Certification and ASE Steering & Suspension Certification available in this program.

AUTO SERVICES TECHNOLOGY II

5546

Automotive Services Technology II is a one year course that encompasses the sub topics of the NATEF/ASE identified areas of Electrical Systems and Engine Performance. This one year course offering may be structured in a series of two topics per year offered in any combination of instructional strategies of semester based or yearlong instruction. Additional areas of manual transmissions /differentials, automatic transmissions, air conditioning, and engine repair should be covered as time permits. This one-year offering must meet the NATEF program certifications for the two primary areas offered in this course. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, colleagues, and supervisors. IVY TECH / AUTI 111 Electrical Systems I, AUTI 121 Brake Systems, and AUTI 131 Engine Performance Systems dual credit available in this program. ASE Brakes Certification and ASE Electrical Certification available in this program.