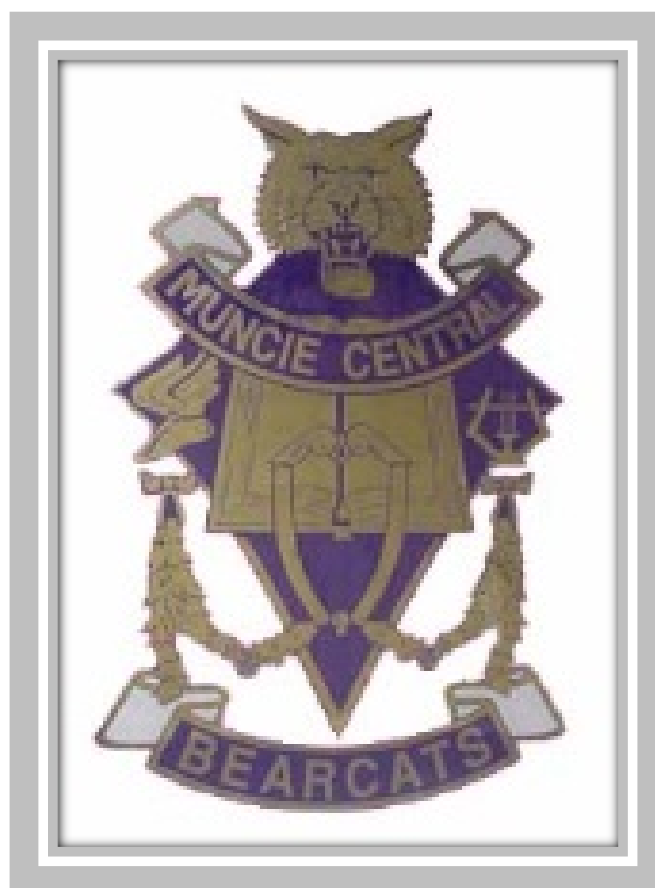


# Muncie Community Schools



## 2018-2019 Curriculum Handbook

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## **BOARD OF SCHOOL TRUSTEES**

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## **FOREWORD**

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

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

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

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

Graduation requirements classes and classes beyond are specific and must be understood before developing the high school program.

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## GENERAL INFORMATION

### DEFINITIONS

**Plan of Study** is a curriculum area under which course titles can be grouped in order to define concentrations in the student's career pathway to ensure a broad curriculum base.

**Core 40** is a high school curriculum that helps prepare students for college. It includes a series of academically challenging courses in English, mathematics, science, and social studies. A student also must complete directed electives selected from world language, fine arts, or career-technical courses.

**Core 40 with Academic Honors** has the Core 40 requirements as the base with additional requirements in mathematics, world languages, fine arts and other rigorous requirements above and beyond those required for the Core 40 diploma.

**Core 40 with Technical Honors** has the traditional Core 40 requirements as the base with rigorous requirements in career and technical education course work.

**Credit** means satisfactory completion of an approved course with a grade of "D" or better.

**General Diploma** is an official documentation of graduation issued by the governing body of a school corporation certifying that the student has satisfied the minimum requirements for graduation from a high school.

**Graduation Qualifying Examination** – ISTEP+ Grade 10

**IDOE** stands for Indiana Department of Education.

**Instructional Time** is the time during which students are engaged in an approved course or curriculum or an educationally related activity under the supervision of a teacher.

**Laboratory Course**, which is designated by **(L)** following a course title, is a course in which a minimum of twenty-five percent (25%) of the total instructional time is devoted to laboratory activities.

**Semester** means half of a regular school year, which is usually 18 weeks.

### GENERAL PRINCIPLES

The following general principles are a guide to school corporations in certifying to the Indiana State Board of Education that students are qualified for high school graduation:

- The standards in 511 IAC 6-7.1-4 to 6-7.1-9 are minimum requirements for granting a high school diploma. School corporations may establish graduation requirements which exceed these minimum standards, in which case, the local standards take precedence.
- Students who cannot demonstrate competency in the basic skills necessary for future learning, to the satisfaction of the governing body of the school corporation, shall not be graduated from a high school certified by the IDOE.
- The commission recognizes no high school diplomas other than those conferred by schools certified by it.

## **GRADUATION REQUIREMENTS FOR CLASSES 2018 and Beyond**

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

1. Pass the ISTEP 10 English and Math.
2. Complete all credits per the state of Indiana and other requirements established by the Muncie Community School Board. Students are required to attain a minimum IDOE requirements as well as an additional four (4) credits to earn a Muncie Community Schools' high school diploma. Students can be waived from the additional credits set by MCS by completing a Graduation Credit Waiver form with the signature of the Director of Secondary Curriculum or Director of Special Education.

### **GRADUATION QUALIFYING EXAMINATION**

Students are required to achieve passing scores on the ISTEP 10 English and Math (or qualify for a waiver) in order to meet the Indiana graduation requirement. The ISTEP 10 tests are administered to students at completion of Algebra I and English 10 courses and assess the student's mastery of the Indiana Academic Standards for Algebra I and English 10.

### **GQE REQUIREMENTS**

There are three ways in which a student may meet the graduation requirements:

1. Passing scores on the ISTEP 10 English & Math or
2. Fulfilling the requirements for an "Evidence-based" Waiver, or
3. Fulfilling the requirements for a "Work-readiness" Waiver

#### **"Evidence-based" Waiver**

A student who does not achieve a passing score on the graduation examination may be eligible to graduate if the student has done all of the following during high school:

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

### **“Work-readiness” Waiver**

A student who does not achieve a passing score on the graduation examination may be eligible to graduate if the student has done all of the following during high school:

- (1) Takes the graduation examination in each subject area in which the student did not achieve a passing score at least one (1) time every school year after the school year in which the student first takes the graduation examination,
- (2) Completes remediation opportunities provided to the student by the student's school,
- (3) Maintains a school attendance rate of at least ninety-five percent (95%) with excused absences not counting against the student's attendance,
- (4) Maintains at least a "C" average or the equivalent in the courses comprising the credits specifically required for graduation by rule of the IDOE,
- (5) Otherwise satisfies all state and local graduation requirements, and
- (6) Completes the course and credit requirements for a General Diploma, including the career academic sequence, a workforce readiness assessment, and workforce industry certification.

### **EARLY GRADUATION**

- The student will meet all graduation credit requirements by the graduation date requested and will have satisfied GQE requirements both the Algebra I AND English 10 ISTEP exams before applying for early graduation.
- Request for one-year early graduation must be submitted prior to the start of their junior year. Students must have earned 28 credits prior to the submission of their request.
- Request for one semester early graduation must be submitted prior to the start of their senior year. Students must have earned 37 credits prior to the submission of their request.

The high school principal is responsible for approving early graduation requests. If the student's request is denied, it may be appealed to the Superintendent, and a decision of the Superintendent to deny a request may be appealed to the Board of School Trustees. A student granted a request for early graduation may participate in the graduation ceremonies with his/her designated class.

**Applied Mathematics 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.

- (1) For the **Core 40, Academic Honors (AHD), and Technical Honors (THD) diplomas**, students must take a mathematics course or another quantitative reasoning course each year they are enrolled in high school.
- (2) For the **General Diploma**, students must earn two credits in a mathematics course or another quantitative reasoning course during their junior or senior year.
- (3) Applied Math (quantitative reasoning) Course List From Indiana Department of Education
  - courses offered at MCS

<p><b>Advanced Placement</b></p> <ul style="list-style-type: none"> <li>➤ Biology, Advanced Placement</li> <li>➤ Calculus AB, Advanced Placement</li> <li>➤ Calculus BC, Advanced Placement</li> <li>➤ Chemistry, Advanced Placement</li> <li>Computer Science A, Advanced Placement</li> <li>Environmental Science, Advanced Placement</li> <li>➤ Macroeconomics, Advanced Placement</li> <li>➤ Microeconomics, Advanced Placement</li> <li>➤ Physics B, Advanced Placement</li> <li>Physics C, Advanced Placement</li> <li>Statistics, Advanced Placement</li> </ul> <p><b>Agriculture Education</b></p> <p>Advanced Life Science, Animals  Advanced Life Science, Foods  Agribusiness Management  Landscape Management</p> <p><b>Business, Marketing, and Information Technology Education</b></p> <ul style="list-style-type: none"> <li>➤ Accounting</li> <li>➤ Business Math</li> <li>➤ Computer Programming I</li> <li>➤ Computer Programming II</li> <li>➤ Computer Science A, Advanced Placement</li> <li>Computer Science Higher Level, International Baccalaureate</li> <li>Computer Science Standard Level, International Baccalaureate</li> <li>➤ Global Economics</li> <li>➤ Financial Services- Accounting II</li> </ul> <p><b>Engineering and Technology</b></p> <p>Aerospace Engineering</p> <ul style="list-style-type: none"> <li>➤ Civil Engineering and Architecture</li> </ul> <p>Computer Integrated Manufacturing</p> <ul style="list-style-type: none"> <li>➤ Digital Electronics</li> <li>➤ Engineering Design and Development</li> <li>➤ Principles of Engineering</li> </ul> <p><b>Family and Consumer Sciences</b></p> <ul style="list-style-type: none"> <li>➤ Advanced Life Science: Foods</li> </ul> <p><b>International Baccalaureate</b></p> <p>Chemistry Higher Level, International Baccalaureate  Chemistry Standard Level, International Baccalaureate  Computer Science Higher Level, International Baccalaureate  Economics Higher Level, International Baccalaureate  Economics Standard Level, International Baccalaureate  Further Mathematics Standard Level, International Baccalaureate  Mathematical Studies Standard Level, International Baccalaureate  Mathematics Higher Level, International Baccalaureate  Mathematics Standard Level, International Baccalaureate  Physics, Higher Level, International Baccalaureate  Physics Standard Level, International Baccalaureate</p>	<p><b>Mathematics</b></p> <ul style="list-style-type: none"> <li>➤ Algebra Enrichment</li> <li>➤ Algebra I</li> <li>➤ Algebra II</li> <li>➤ Calculus AB, Advanced Placement</li> <li>➤ Calculus BC, Advanced Placement</li> <li>➤ Finite Mathematics</li> <li>➤ Geometry</li> <li>➤ Pre-Calculus/Trigonometry</li> <li>➤ Probability and Statistics</li> </ul> <p><b>Science</b></p> <ul style="list-style-type: none"> <li>➤ Biology, Advanced Placement</li> <li>➤ Chemistry I</li> <li>➤ Chemistry II</li> <li>➤ Chemistry, Advanced Placement</li> <li>Chemistry Higher Level, International Baccalaureate</li> <li>Chemistry Standard Level, International Baccalaureate</li> <li>Environmental Science, Advanced Placement</li> <li>➤ Integrated Chemistry-Physics</li> <li>➤ Physics I</li> <li>➤ Physics II</li> <li>Physics B, Advanced Placement</li> <li>Physics C, Advanced Placement</li> <li>Physics Higher Level, International Baccalaureate</li> <li>Physics Standard Level, International Baccalaureate</li> </ul> <p><b>Social Studies</b></p> <ul style="list-style-type: none"> <li>➤ Economics</li> <li>Economics Higher Level, International Baccalaureate</li> <li>Economics Standard Level, International Baccalaureate</li> <li>➤ Macroeconomics, Advanced Placement</li> <li>➤ Microeconomics, Advanced Placement</li> </ul> <p><b>Trade and Industrial Education</b></p> <p>Advanced Manufacturing II  Architectural Drafting and Design II  Construction Technology: Electrical II  Construction Technology: HVAC II  Electronics and Computer Technology II  Mechanical Drafting and Design II  Precision Machining I  Precision Machining II</p>
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## **ADVANCED PLACEMENT**

- Advanced Placement (AP) course will be available for open enrollment.
- Freshman and sophomore student progress will be reviewed by the end of the first nine weeks, and struggling students may be removed.

## **ACCUPLACER**

Early diagnostic testing, plus intervention for students who are not yet college-ready, can lead to proficiency by the time students' graduate from high school. Your student will take part in a testing series which will assist with determining college readiness in the areas of reading and mathematics

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

## **CORE 40 COLLEGE ADMISSIONS REQUIREMENT**

The Indiana General Assembly passed a law in 2005 that makes Core 40 a minimum requirement for admission to Indiana four-year public universities effective fall 2011.

Students not completing Core 40, but wishing to attend a public four-year university, need to prove that they are prepared to succeed in credit-bearing college coursework. They can do this by applying for acceptance as a transfer student upon successful completion of at least twelve (12) credit hours of college-level courses with at least a "C" average or the equivalent in each course.



**Core 40 Diploma  
(Minimum 40 Credits)**

<b>English/Language Arts</b>	<b>8 Credits</b> English 9–12 fulfill this requirement Other English courses may fulfill this requirement.
<b>Mathematics</b>	<b>6 Credits</b> (in grades 9-12) Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry, Calculus, Probability & Statistics, Finite Math
<b>Applied Reasoning</b>	For the Core 40 diploma, students must take a mathematics course or alternate quantitative reasoning course each year they are enrolled in high school.
<b>Science</b>	<b>6 Credits</b> 2 credits: Biology I 2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 Credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>Physical Education</b>	<b>2 Credits</b>
<b>Health &amp; Wellness</b>	<b>1 Credit</b>
<b>Directed Electives</b>	<b>5 Credits</b> World Languages: French, Latin, Spanish, Japanese Fine Arts: Music, Theatre, Visual Arts, Mass Media Career/Technical: Computers, Business, PLTW courses, Career & Technical Education, or Family Consumer Science
<b>Electives</b>	<b>6 Credits</b>
<b>TOTAL</b>	<b>40 Credits – Minimum Required for an MCS Diploma</b>

**Core 40 with Academic Honors  
(Minimum 47 Credits)**

<b>English/Language Arts</b>	<b>8 Credits</b> English 9 –12 fulfill this requirement Other English courses may fulfill this requirement.
<b>Mathematics</b>	<b>8 Credits (in grades 9-12)</b> Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry, Calculus, Probability & Statistics, Finite Math If a student has completed a middle school curriculum that is equivalent to high school Algebra I and is placed in Geometry, that student must earn only six (6) high school mathematics credits.
<b>Applied Reasoning</b>	For the Academic Honors Diploma students must take a mathematics course or a quantitative reasoning course each year they are enrolled in high school.
<b>Science</b>	<b>6 Credits</b> 2 credits: Biology I 2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 Credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or Geography/History of the World
<b>World Languages</b>	<b>6 – 8 Credits</b> French, Latin, Spanish, Japanese Six (6) credits in a single world language or four (4) credits in each of two (2) different world languages
<b>Fine Arts</b>	<b>2 Credits</b> Music, Theatre, Visual Arts
<b>Physical Education</b>	<b>2 Credits</b>
<b>Health &amp; Wellness</b>	<b>1 Credit</b>
<b>Electives</b>	<b>7-9 Credits</b> Core 40 courses/credits which will enhance or support the academic career sequence of the student's graduation plan
<b>Grade Requirements</b>	- 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
<b>Other Requirements</b>	Complete <b>one</b> of the following: A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams B. Earn 6 verifiable transcribed college credits in dual credits courses from priority course list C. Earn <b>two</b> of the following: 1. A minimum of 3 verifiable transcribed college credits from the priority course list, 2. 2 credits in AP courses and corresponding AP exams, D. Earn a combined score of – 1250 or higher w/a minimum score of 560 on math and 590 on the evidence based reading and writing. E. Score a 26 or higher composite on ACT
<b>TOTAL</b>	<b>47 Credits required for Core 40 with Academic Honors</b>

**Core 40 with Technical Honors  
(Minimum 47 Credits – 2017 and Beyond)**

<b>English/Language Arts</b>	<b>8 Credits</b>
	English 9–12 fulfill this requirement Other English courses may fulfill this requirement.
<b>Mathematics</b>	<b>6 Credits</b> (in grades 9-12)
	Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry, Calculus, Probability & Statistics, Finite Math
<b>Quantitative Reasoning</b>	For the Core 40 with Technical Honors diploma, students must take a mathematics course or alternate quantitative reasoning course each year they are enrolled in high school.
<b>Science</b>	<b>6 Credits</b>
	2 credits: Biology I
	2 credits: Chemistry I, Physics I, or Integrated Chemistry/Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	<b>6 Credits</b>
	2 credits: U.S. History
	1 credit: U.S. Government
	1 credit: Economics
<b>Career-Technical Pathways</b>	2 credits: World History/Civilization or Geography/History of the World
	<b>6 or more Credits</b> Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and <b>one</b> of the following: 1. Pathway designated industry-based certification or credential, or 2. Pathway dual credits from the lists of priority courses resulting in six (6) Transcribed college credits
<b>Physical Education</b>	<b>2 Credits</b>
<b>Health &amp; Wellness</b>	<b>1 Credit</b>
<b>Electives</b>	<b>6 or more Credits</b>
	Core 40 courses/credits which will enhance or support the academic career sequence of the student's graduation plan.
<b>Grade Requirements</b>	- 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
<b>Other Requirements</b>	Complete <b>one</b> of the following: A. Any one of the options (A-F) of the Core 40 with Academic Honors B. Earn the following scores or higher on WorkKeys: Reading for Information Level 6; Applied Mathematics – Level 6; Locating Information – Level 5 C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, and Math 75 D. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80 E. Receive a score of 4 or higher on the Project Lead the Way End of Program Assessment
<b>TOTAL</b>	<b>47 Credits required for Core 40 with Technical Honors</b>

## General Diploma (Minimum 40 Credits)

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

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

<b>English/Language Arts</b>	<b>8 Credits</b> English 9–12 fulfill this requirement Other English courses may fulfill this requirement.
<b>Mathematics</b>	<b>4 Credits</b> 2 credits: Algebra I or Integrated 2 credits: any math course
<b>Quantitative Reasoning</b>	For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning course during their junior or senior year.
<b>Science</b>	<b>4 Credits</b> 2 credits: Biology I 2 credits: any science course (at least one must be from a Physical or Earth and Space Science course)
<b>Social Studies</b>	<b>4 Credits</b> 2 credits: U.S. History 1 credit: U.S. Government 1 credit: any social studies course
<b>Physical Education</b>	<b>2 Credits</b>
<b>Health &amp; Wellness</b>	<b>1 Credit</b>
<b>College and Career Pathway Courses</b>	<b>6 Credits</b> Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities.
<b>Flex Credit</b>	<b>5 Credits</b> To earn 5 Flex Credits a student must complete one of the following: <ul style="list-style-type: none"> <li>• Additional courses to extend the College and Career Pathway</li> <li>• Courses involving workplace learning, which may include the following courses: <ul style="list-style-type: none"> <li>High school/college dual credit courses</li> <li>Additional courses in: <ul style="list-style-type: none"> <li>○ Language Arts, Social Studies, Mathematics, Science, World Languages, and Fine Arts</li> </ul> </li> </ul> </li> </ul>
<b>Electives</b>	<b>6 Credits</b>
<b>TOTAL</b>	<b>40 Credits – Minimum Required for an MCS Diploma</b>

## **Opt-Out Process from Indiana's Core 40 Graduation Requirements**

The Indiana General Assembly made completion of Core 40 a graduation requirement for all students. The legislation includes an opt-out provision for parents who determine that their student could benefit more from the General Diploma. To graduate with less than Core 40, the following formal opt-out process must be completed: (Indiana Code 20-32-4-7, 8, 9, 10)

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

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

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

### **Core 40 Opt-Out Conditions**

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

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

## **CURRICULAR OFFERINGS**

### **ADVANCED PLACEMENT COURSES**

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

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

**Note:** Students taking an Advanced Placement (AP) Course will be required to take the corresponding AP Exam at the end of the course.

### **GIFTED AND TALENTED PROGRAM - HONORS CLASSES**

The Muncie Community Schools, through its Gifted and Talented Program, offers Honors courses to students in grades six (6) through twelve (12). Students are selected for participation in the program based on their academic achievement and standardized test scores, course grades, and teacher recommendations. Parents may also refer their children for program consideration.

### **CORRESPONDENCE CREDIT**

Under some circumstances a student may complete courses by correspondence with the prior approval of the local school board or its designee (in Muncie Community Schools, the high school principal). The school may accept credit earned by a student through correspondence study toward satisfying the requirements for graduation, providing the course has been approved by the principal in advance of the student's enrollment. Such credit is earned through the satisfactory completion of courses offered by an institution accredited by the AdvancED Association or one of the other regional accrediting associations. A maximum of eight (8) credits may be accepted; however, more may be accepted for adult or physically disabled students and for

students residing in places where an accredited high school is not accessible for resident study.

## **CREDIT RECOVERY**

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

Student must be on a diploma track and referred to the program by a school administrator or school counselor and

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

## **RETAKE A COURSE**

Students are permitted to retake a course for a higher grade that will be recorded in the student's record. If a student elects to retake a course, both grades will be included in the calculations of the grade point average; however, only one (1) credit may be counted toward the graduation requirements.

## **RECEIVING CREDITS BY DEMONSTRATING PROFICIENCY** (Indiana Code 20-36-5-1)

A student shall receive credits toward graduation or an academic honors diploma by demonstrating the student's proficiency in a course or subject area required for graduation or the academic honors diploma, whether or not the student has completed course work in the subject area, by any one (1) or more of the following methods:

- 1) Receiving a score that demonstrates proficiency on a standardized assessment of academic or subject area competence that is accepted by accredited postsecondary educational institutions
- 2) Receiving a high proficiency level score on an end-of-course assessment for a course without taking the course.
- 3) Successfully completing a similar course at an eligible institution under the postsecondary enrollment program under IC 21-43-4.
- 4) Receiving a score of three (3), four (4), or five (5) on an advanced placement examination for a course or subject area.

5) Other methods approved by the State Board of Education.

### **DUAL CREDIT**

Dual credit is when high school students have the opportunity to earn both high school and college credits simultaneously. Dual credit courses are taught by high school faculty, adjunct college faculty or college faculty either at the high school, at the college or university, or sometimes through online courses or distance education.

**Note:** A PSAT, SAT, ACT, and/or an Accuplacer score will be used to determine whether a student qualifies to enroll for dual credit. If a student does not qualify for the dual credit, he/she may remain in the course and earn HS credit.

### **POST-SECONDARY CREDIT**

A local school board shall recognize courses completed in a post-secondary institution in meeting high school graduation requirements provided that:

- the institution is an accredited public or private college or university located in Indiana that grants a baccalaureate or associate degree
- prior approval is obtained as outlined by the local school board policy.

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

### **CLASS AUDIT**

Students may be allowed to audit a class using the following criteria:

- The student must have the approval of the principal after the student has consulted with the counselor and teacher.
- The student would be on a stand-by basis as class size permits.
- The student must do assignments required of students taking the class for credit.
- The student must adhere to the school's attendance policy.
- The student cannot audit and then later take the class for credit.

A student should see his or her counselor for an application to audit a class, prior to the start of the semester.

### **ENROLLMENT ON PASS/FAIL BASIS**

Students may elect to take one class each year for one semester on a pass/fail basis. Only one class may be taken on a pass/fail basis from a subject matter area.

Enrollment for pass/fail credit should be requested on the proper form at the time of regular enrollment in a class but must be done prior to the first day of class. *Courses taken on a pass/fail basis cannot count toward the Core 40, Core 40 with Academic Honors Diploma, or Core 40 with Technical Honors.*

### **GRADE PROGRESS REPORTS**

Grade cards are distributed at the end of the nine-weeks' grading period. Mid-term progress reports will be provided online for each student on four dates specified by the corporation.



## **GRADING SCALE**

The Muncie Community Schools' 9-12 grade scale is:

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

## **WEIGHTED GRADES**

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

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

## **WITHDRAWAL FROM CLASS**

Each class lost from a student's schedule will be recorded as a WD only if a student is passing at the time of withdrawal. A student who is failing at the time of withdrawal will receive a WD/F.

## **HONOR ROLL ELIGIBILITY CRITERIA**

There will be three Honor Roll categories for secondary schools:

*4.0 Grade Point Average Honor Roll*

*3.5 Grade Point Average Honor Roll*

*3.0 Grade Point Average Honor Roll*

Additional criteria:

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

## **GRADE REVIEW GUIDELINES**

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

1. A conference with student and teacher will occur.
2. A conference with parent/guardian and teacher will occur. Other appropriate school personnel may be involved if requested.
3. Formal request for a grade review must be made on the appropriate form within five (5) days following the official date grades are issued.
4. A conference involving a building administrator, parent/guardian, student, teacher, and other appropriate school personnel will be scheduled.

5. Closure of a grade review request will occur within the ten (10) school days following the official date grades are issued.
6. At the end of the school year the formal request must be made on the appropriate form within one (1) week. Closure of the grade review request will occur within two (2) weeks following the official date grades are issued.
7. After closure of the grade review request, a student's grade may be adjusted.

### **EXTRA-CURRICULAR ELIGIBILITY**

To be eligible for participation in any school-sponsored extracurricular activities, a student must be passing in at least five (5) subjects each grading period and at the end of a semester. At the end of a semester, the semester grades take precedence over the grades earned the last grading period. A student who is passing in five (5) subjects but maintaining less than a 2.0 GPA at the end of a grading period or semester will be required to participate in a before- and after-school study program at least twice a week to maintain eligibility. Failure to participate in the study program will make the student ineligible for participation in extracurricular activities for the grading period. Eligibility will be determined by the last grades officially posted. For example, a student's grades at the end of the second semester will determine eligibility at the beginning of the following year. A student's summer school grades can be used to re-establish lost at the end of the second semester provided the student has passed a total of five (5) combined classes for the second semester and summer school.

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

### **COLLEGE ATHLETIC ELIGIBILITY**

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

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

**SCHEDULE CHANGES**

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

**SPECIAL EDUCATION**

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

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

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

**BUSINESS, MARKETING, & TECHNOLOGY EDUCATION Page 1 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0101 Intro to Accounting 1		F			
0102 Intro to Accounting 2		S			Intro to Accounting 1
0103 Advanced Accounting 1			F		
0104 Advanced Accounting 2			S		Advanced Accounting 1
0109 Business Law and Ethics			E		
0123 Digital Applications and Responsibility 1		F			
0124 Digital Applications and Responsibility 2		S			Digital Applications and Responsibility 1
0131 Introduction to Business 1	F				
0132 Introduction to Business 2	S				Introduction to Business 1
0133 Personal Financial Responsibility	E				
0143 Principles of Marketing 1			F		
0144 Principles of Marketing 2			S		Principles of Marketing 1

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

**BUSINESS, MARKETING, & TECHNOLOGY EDUCATION Page 2 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0141 Strategic Marketing 1				F	
0142 Strategic Marketing 2				S	
0146 Sports and Entertainment Marketing 1			F		Principles of Marketing
0147 Sports and Entertainment Marketing 2			S		Sports and Entertainment Marketing 1
0171 Business Math 1		F			Algebra I
0172 Business Math 2		S			Business Math 1
0181 Entrepreneurship and New Ventures 1			E		Intro to Entrepreneurship Digital Applications and Responsibility
0182 Entrepreneurship and New Ventures 2			E		
0183 Principles of Business Management 1		F			
0184 Principles of Business Management 2		S			Principles of Business Management 1
8211-8214 PC and Network Support Pathway: Computer Tech Support (6 credits)			Y		See Career and Technical Education Section IT Academy.
8221-8224 Interactive Media			Y		See Career and Technical Education Section IT Academy.
8041-8043 Web & Digital Communications Pathway: Computer Illustration & Graphics (4 credits)			Y		See Career and Technical Education Section IT Academy.
8042-8044 Web & Digital Communications Pathway: Web Design (2 credits)			Y		See Career and Technical Education Section IT Academy.
8042-8044 Web & Digital Communications Pathway: Web Design (2 credits)			Y		See Career and Technical Education Section IT Academy.

## BUSINESS, MARKETING, AND TECHNOLOGY EDUCATION

### **0101 Intro to Accounting 1**

### **0102 Intro to Accounting 2**

Accounting introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision making. One semester each, one credit each, 10-12<sup>th</sup> grades, elective. *Counts as a Directed Elective or Elective for all diplomas.*

### **0103 Advanced Accounting 1**

### **0104 Advanced Accounting 2**

Pre-requisite: Intro to Accounting. Financial Services provides instruction in finance and business fundamentals as they relate to financial institutions, financial planning, business and personal financial services, investment and securities, risk management, and corporate finance. Students are provided opportunities to develop attitudes and apply skills and knowledge in the area of finance. One semester each, one credit each, 11-12<sup>th</sup> grades, elective. *A Core 40 directed elective or elective for AHD and THD. Qualifies as a quantitative reasoning course.*

### **0109 Business Law and Ethics**

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

### **0123 Digital Applications and Responsibility 1**

### **0124 Digital Applications and Responsibility 2**

*Digital Applications and Responsibility* prepares students to use technology in an effective and appropriate manner in school, in a job, or everyday life. Students develop skills related to word processing, spreadsheets, presentations, and communications software. Students learn what it means to be a good digital citizen and how to use technology, including social media, responsibly. Students expand their knowledge of how to use digital devices and software to build decision making and problem solving skills. Students should be provided with the opportunity to seek industry-recognized digital literacy certifications.

- *Recommended Grade Level: Grade 9-12*
- *Recommended Prerequisites: None*
- *Credits: 1 credit per semester, maximum of 2 credits*
- *Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas*
- *This course is aligned with postsecondary courses for Dual Credit*

**0131 Introduction to Business 1**

**0132 Introduction to Business 2**

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

**0133 Personal Financial Responsibility**

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

**0141 Strategic Marketing 1**

**0142 Strategic Marketing 2**

Strategic Marketing builds upon the foundations of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology and economics. The relationship between consumer behavior and marketing activities will be reviewed. Principles of Marketing is recommended as a pre-requisite. *One semester, one credit each, 12th grade, elective. A Core40 directed elective or elective for AHD and THD.*

**0143 Principles of Marketing 1**

**0144 Principles of Marketing 2**

This course provides a basic introduction to the scope and importance of marketing in the global economy. Emphasis is placed on oral and written communications, mathematical applications, problem solving, and critical thinking skills as they relate to advertising/promotion/selling, distribution, financing, marketing-information management, pricing, and product/service management. This course is aligned with postsecondary courses for **Dual Credit**. **One semester, one credit, 11-12<sup>th</sup> grades. A Core 40 directed elective or elective for AHD and THD.**

**0146 Sports and Entertainment Marketing 1****0147 Sports and Entertainment Marketing 2**

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

**0171 Business Math 1****0172 Business Math 2**

*Business Math* is a business course designed to prepare students for roles as entrepreneurs, producers, and business leaders by developing abilities and skills that are part of any business environment. A solid understanding of math including algebra, basic geometry, statistics and probability provides the necessary foundation for students interested in careers in business and skilled trade areas. The content includes mathematical operations related to accounting, banking and finance, marketing, and management. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

- Recommended Grade Level: 10-11
- Recommended Prerequisite: Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Fulfills a Mathematics requirement for the General Diploma only or counts as an Elective or Directed Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a quantitative reasoning course

**0181 Entrepreneurship and New Ventures 1****0182 Entrepreneurship and New Ventures 2**

The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis, and “go to” market strategies will be explored through mini case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting, and business plan development will be presented through extensive use of word processing, spreadsheet and presentation software. One semester, one credit, 12<sup>th</sup> grade, elective. This course is aligned with postsecondary courses for Dual Credit. *A Core40 directed elective or elective for AHD and THD.*



### **0183 Principles of Business Management 1**

### **0184 Principles of Business Management 2**

Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized. One semester, one credit, 11-12<sup>th</sup> grades. This course is aligned with postsecondary courses for Dual Credit. *A Core 40 directed elective or elective for AHD and THD.*

**The following courses are taught in the occupational programs located at the Muncie Area Career Center.**

#### **Two Strands**

1. PC and Network Support Pathway (2 semesters)
  - 1<sup>st</sup> Semester Computer Tech Support (3 credits)
  - 2<sup>nd</sup> Semester Network Fundamentals (3 credits)
  
2. Web & Digital Communications (2 semesters)
  - 1<sup>st</sup> Semester Interactive Media (3 credits)
  - 2<sup>nd</sup> Semester Computer Illustrations & Graphic Arts (2 credits)  
And Web Design (1 credit)

#### **PC and NETWORK SUPPORT PATHWAY**

##### **8211-8214 Computer Tech Support** *(PC and Network Support Pathway)*

Students will be introduced to careers in technical support and network administration. Students will learn the functionality of computer hardware and software components as well as suggested best practices in maintenance, safety issues, and security. Through hands-on labs and Virtual Laptop and Virtual Desktop learning tools, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. Students will also learn core IT skills during this first-year program. One-semester course, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

##### **8215-8218 Networking Fundamentals** *(PC and Network Support Pathway)*

Pre-requisite: Computer Tech Support course. Networking Fundamentals introduces students to concepts of 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 integration will be introduced and emphasized throughout this course. 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. One semester course, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

## **WEB and DIGITAL COMMUNICATIONS PATHWAY**

### **8221-8224 Interactive Media** *(Web & Digital Communications Pathway)*

The Interactive Media pathway will prepare students for creating, designing, and producing interactive media products and services. This course emphasizes the advanced development of digitally generated or computer-enhanced products using multimedia technologies. This course will allow students to have experiences in various software programs involved in creating multimedia presentations, digital movies, digital animation, game creation, and digital photography. Students explore the role of the Internet as it relates to communication and marketing. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the “virtual workplace”. Two semester course, three credits per semester, 11-12<sup>th</sup> grades. A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.

### **8041-8043 Computer Illustration & Graphics** *(Web & Digital Communications Pathway)*

A portion of this class includes Web Design and development. Students learn core IT skills related to computer hardware, software integration, and project management skills. The focus of the course is learning design techniques, layout and using various software programs for creating digitally-generated or computer-enhanced media. This includes the content listed in Web Design course description. One-semester course, two to three credits per semester, 11-12<sup>th</sup> grades. A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.

### **8042-8044 Web Design** *(Web & Digital Communications Pathway)*

This class is incorporated into the Computer Illustrations & Graphics course to include website design and development concepts. This part of the course provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Through hands-on experiences students will learn to use various software programs for creating digitally-generated or computer-enhanced media. One-semester course, one to three credits per semester, 11-12<sup>th</sup> grades. A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.

**FAMILY AND CONSUMER SCIENCES Page 1 of 1**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0701 Child Development		F			<b>1 credit maximum</b>
0703 Advanced Child Development 1			F		Child Development
0704 Advanced Child Development 2			S		Advanced Child Development 1
0709 Consumer Economics		E			
0721 Nutrition and Wellness 1	F				<b>Health Waiver</b>
0722 Nutrition and Wellness 2	S				Nutrition and Wellness 1
0723 Advanced Nutrition and Wellness 1		F			Nutrition and Wellness 2
0724 Advanced Nutrition and Wellness 2		S			Advanced Nutrition and Wellness 1
0739 Introduction to Housing and Interior Design			E		Fine Arts (AHD)
0749 Adult Roles and Responsibilities			E		Health Waiver
0759 Interpersonal Relationships	E				Health Waiver
0761 Preparing for College and Career		E			Health Waiver
0779 Introduction to Fashion and Textiles	E				<b>Fine Arts (AHD)</b>

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma
- Health Waiver – Must take 3 and qualifies as a course to waive “Health”.

## FAMILY AND CONSUMER SCIENCES

### **0701 Child Development**

Addresses the growth and development of children. Caregivers and future parents will study physical, social, emotional, and intellectual growth of children. This study will help the student progress academically through furthering his/her own expertise in child development and guidance. The class will be project-based and focus on parenting practices and skills that support positive development of children. Includes topics such as pre-natal development, the needs of infants and children, and impacts of heredity, environment, and family and societal crisis on the development of the child. Ways of meeting children's needs for food, clothing, shelter, and care giving will be explored. Qualifies as one of the classes to waive Health & Wellness. One semester each, one credit each, 10-12<sup>th</sup> grades, elective. *A Core 40 directed elective or elective for AHD and THD.(one credit max)\**

### **0703 Advanced Child Development 1**

### **0704 Advanced Child Development 2**

Explores issues of child development and early childhood education with special emphasis on ways of guiding physical, social, emotional, intellectual, moral, and cultural development throughout childhood, including school-age children. Students will discuss practices that promote long-term well-being of children and their families, appropriate intervention strategies with individuals and groups of children, brain/learning research, and ideas for meeting needs of children. Child-related careers will be explored and field-based or school-based experiences will be encouraged. One semester each, one credit each, 11-12<sup>th</sup> grades, elective. *A Core 40 directed elective or elective for AHD and THD.*

### **0709 Consumer Economics**

This class places emphasis on advertising, consumer rights and responsibilities, transportation, housing, food, clothing, health insurance, and the use of the recreation dollar. The rising cost of living makes it important to learn to manage resources in a satisfying way. Field trips, speakers, films, and some laboratory work will be included. Fulfills a Social Studies requirement for General Diploma only. One semester, one credit, 10-12<sup>th</sup> grades, elective. *A Core 40 directed elective or elective for AHD and THD.*

### **0721 Nutrition and Wellness 1**

### **0722 Nutrition and Wellness 2**

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

**0723 Advanced Nutrition and Wellness 1**

**0724 Advanced Nutrition and Wellness 2**

Includes nutritional needs at various stages of life, technology's influence on the food we eat, and world concerns such as hunger. Laboratory experiences are encouraged. Nutrition and global concerns will be related and careers explored. Designed for students who are interested in advanced foods and nutritional needs. Topics include nutrition and wellness for individuals and families across the life span, community and world food concerns, impact of technology on the food and health industry, exploration of careers, and management of food-related resources. *Recommended pre-requisite: student has earned credit in Nutrition and Wellness 1 or 2. One semester each, one credit each, 10-12<sup>th</sup> grades, elective A Core 40 directed elective or elective for AHD and THD.*

**0739 Introduction to Housing and Interior Design**

This course is fashioned for students interested in home design and furnishings. Some activities include field trips, speakers from various fields of home design, planning furnishings of a home, and drawing a home plan. Topics may include housing to meet special needs, principles of design related to interiors, housing, and architecture; floor planning skills; and housing-related careers. One semester, one credit, 11-12<sup>th</sup> grades, elective. Student must have 3 courses to fulfil requirements. *A Core 40 directed elective or elective for AHD and THD. Fulfills fine arts requirements for C-40 AHD \**

**0749 Adult Roles and Responsibilities**

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

**0759 Interpersonal Relationships**

This is a study of individual behavior in a contemporary society. Emphasis is on understanding one's own needs, values, decision making, and attitudes toward self and others, as well as skills that are needed to create caring and respectful relationships in the family and workplace. This course will help foster personal development to get along with parents, grandparents, peers, and others. Qualifies as one of the classes to waive Health & Wellness. One semester, one credit, 9-12<sup>th</sup> grades, elective. *A Core 40 directed elective or elective for AHD and THD. Qualifies as a course to waive Health.*

### **0761 Preparing For College and Careers**

This course addresses the essential knowledge, skills, and behaviors that all students need. This course is project-based and emphasizes individual and family topics. Topics that may be addressed are exploration of personal aptitudes, career and life skills, ways to transfer school skills to life and work, decision-making, and organizational skills. This is a foundational course and teaches life skills essential for all high school students. One semester, one credit, 10-12<sup>th</sup> grades. *A Core 40 directed elective or elective for AHD and THD. Qualifies as course to waive Health.*

### **0779 Introduction to Fashion and Textiles**

This class addresses skills related to design, production, and distribution in the textiles, fashion, and home arts industries. Topics include exploration of textiles and fashion industries; design in textiles and apparel; social, psychological, cultural, and environmental aspects of clothing; related equipment and tools and technology that impact the industry; and construction and alteration skills. One credit, one semester, 9-12<sup>th</sup> grades. *A Core 40 directed elective or elective for AHD and THD. Fulfills fine arts requirement for C-40 AHD\**

## **Family and Consumer Sciences – Occupational Programs**

### **Cooperative Occupational Family and Consumer Sciences**

#### **8051 - 8054 Early Childhood Education I & II**

*(Program conducted at Muncie Area Career Center)* This program prepares students for employment in early childhood, education, and related services and provides the foundations for study in higher education that leads to early childhood, education, and other child-related careers. The course of study includes planning and guiding developmentally appropriate activities for pre-school-age children, appropriate practices of guidance and discipline, application of basic health and safety principles when working with children, and overview of management and operation of licensed childcare facilities. Students gain actual experience working with young children by operating the MACC pre-school. Students learn about the requirements for the CDA (Child Development Associate) credential. Both first and second-year students who meet the requirements may participate in non-paid internship experience. Students must provide their own transportation to the internship site. Two, three, or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

#### **8121 - 8124 Health Science I** (Human & Social Services Careers)

*(Program conducted at Muncie Area Career Center)* The curriculum includes introduction to health careers, first aid, CPR, basic anatomy and physiology, vital signs, medical terminology, medical filing, and medical abbreviations. The major focus of the course is preparing students for the Indiana State Certified Nursing Assistant (CNA) certification, which requires completion of a written examination and practical skills test given at the end of the school year. The CNA state training course requires that the student complete, at a minimum, a 75-hour, non-paid, clinical internship in a long-term care facility. All students must have a physical examination, TB test, and drug screen before they can participate in the internship. Students are required to have special uniforms, shoes, and a name tag suitable for

work in the health care facilities where they will receive their clinical experience. Students must provide their own transportation. Students who meet the required criteria may enroll for a second year in the course titled Health Sciences II. Students may enroll for two semesters, three credits per semester in 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

FINE ARTS-MUSIC Page 1 of 1					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
1001 Beginning Concert Band 1 (L)	E				
1002 Beginning Concert Band 2 (L)	E				Beginning Concert Band 1
1005 Advanced Concert Band 1 (L)	E				Audition or Recommendation
1006 Advanced Concert Band 2 (L)	E				Advanced Concert Band 1
1007 Dance Choreography (Color Guard) 1	E				
1008 Dance Choreography (Color Guard) 2	E				Color Guard (Flag Corp) 1
1021 Jazz Ensemble 1 (L)	E				Audition or Recommendation
1022 Jazz Ensemble 2 (L)	E				Jazz Ensemble 1
1049 Beginning Chorus/Mixed 1 (L)	E				
1050 Beginning Chorus/Mixed 2 (L)	E				Beginning Chorus/Mixed 1
1051 Beginning Chorus Women 1 (L)	E				
1052 Beginning Chorus Women 2 (L)	E				Beginning Chorus Women 1
1061 Intermediate Chorus/Sweethearts 1 (L)	E				Audition or Recommendation
1062 Intermediate Chorus/Sweethearts 2 (L)	E				Intermediate Chorus/Sweethearts 1
1071 Advanced Chorus Swing Choir 1 (L)	E				Audition or Recommendation
1072 Advanced Chorus Swing Choir 2 (L)	E				Swing Choir 1
1073 Advanced Chorus Select Choir 1 (L)	E				
1074 Advanced Chorus Select Choir 2 (L)	E				Select Choir 1
1075 Advanced Chorus Sensations 1 (L)	E				
1076 Advanced Chorus Sensations 2 (L)	E				Sensations 1
1080 Music History and Appreciation	E				
1081 Music Theory and Composition 1 (L)	F				
1082 Music Theory and Composition 2 (L)	S				Music Theory and Composition 1

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## FINE ARTS – MUSIC

### **1001 Beginning Concert Band 1(L) (Varsity Band)**

### **1002 Beginning Concert Band 2(L) (Varsity Band)**

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

### **1005 Advanced Concert Band 1(L) (Symphony Band)**

### **1006 Advanced Concert Band 2 (L) (Symphony Band)**

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

### **1007 Dance Choreography 1 (Color Guard)**

### **1008 Dance Choreography 2 (Color Guard)**

A wide variety of learning activities, materials, and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi-styled and multicultural performance expressions. Students experience and learn to use appropriate terminology to describe, analyze, interpret, and critique dance compositions by professional individuals. Time outside the school day may be scheduled for dress rehearsals and performances. Public performances will serve as a culmination of daily rehearsal and performance goals. Students are required to participate in performance opportunities outside the school day that support and



extend the classroom. 2 semesters, one credit per semester, including grades 9-12. *A core 40 directed elective or elective for AHD and THD.*

**1021 Jazz Ensemble 1 (L)**

**1022 Jazz Ensemble 2 (L)**

This course is provided for advanced instrumental music students. Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of the varied styles of instrumental jazz. The instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvising, performing, listening, and analyzing. A limited amount of time outside the school day may be scheduled for dress rehearsals and performances. In addition, a limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students must participate in performance opportunities outside the school day that support and extend learning in the classroom. One to eight semesters, one credit each, 9-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

**1049-1050 Beginning Chorus/Singers/Mixed (L)**

**1051-1052 Beginning Chorus/Singers/Women (L)**

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

**1053-1054 Intermediate Chorus/Sweethearts (L)**

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

**1071-1076 Advanced Chorus (L)**

**1071-1072 (Swing Choir)**

**1073-1074 (Select)**

**1075-1076 Sensations**

Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. The Advanced Chorus may be composed of female chorus or mixed chorus. Activities in this class focus on vocal technique, sight-reading, and performance of a wide variety of literature with an emphasis on choreography as appropriate. A special outfit for performances will be

required. Fund raising opportunities are provided. One to six semesters, 1 credit each, 10-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **1080 Music History and Appreciation**

This course is for students who are interested in learning about many styles and forms of music by listening to, reading about, and analyzing the music of various cultures and time periods. Students may have opportunities to attend live concerts, examine relationships between music and other disciplines, research a particular style of music, or complete a creative project related to the course. One semester, one credit, 9-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **1081 Music Theory and Composition I (L)**

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

### **1082 Music Theory and Composition II (L)**

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

FINE ARTS – THEATRE Page 1 of 1					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0411 Technical Theatre 1 (L)	F				
0412 Theatre Arts History	S				
0413 Technical Theatre 2 (L)		S			Technical Theatre 1
0421 Theatre Arts (L)		F			
0422 Theatre Production (L)		S			Technical Theatre or Theatre Arts
0423 Advanced Theatre Arts (L)			E		Theatre Arts

**Explanations:**

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- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
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- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## FINE ARTS – THEATRE

### **0411 Technical Theatre 1 (L)**

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

### **0413 Technical Theatre 2 (L)**

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

### **0412 Theatre Arts History**

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

### **0421 Theatre Arts (L)**

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

### **0422 Theatre Production (L)**

Instruction in Theatre Production is a co-curricular laboratory for the exploration, development, and synthesis of all of the elements of theatre. Practical hands-on experiences in acting, directing, and stagecraft will be provided through the preparation and public performances of one or more plays. The production of a

play supplements the Technical Theatre and Theatre Arts courses, which concentrate on theories, information, and techniques, by providing for the integration and implementation of those ideas and skills. One semester, one credit, 10-12<sup>th</sup> grades, elective. *A core 40 directed elective or elective for AHD and THD.*

**0423 Advanced Theatre Arts (L)**

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

## FINE ARTS – VISUAL ARTS Page 1 of 1

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0020 Introduction to Two-Dimensional Art (L)	F				
0030 Introduction to Three-Dimensional Art (L)	F				
0021 Advanced Two-Dimensional Art I (L)	S				Introduction to Two- Dimensional Art (L)
0022 Advanced Two-Dimensional Art II (L)		F			Introduction to Two- Dimensional Art I (L)
0023 Advanced Two-Dimensional Art III (L)		S			Introduction to Two- Dimensional Art II (L)
0024 Advanced Two-Dimensional Art IV (L)			F		Introduction to Two- Dimensional Art III (L)
0028 AP Studio Art 2 D-1 (L)				S	Pre-Requisite Teacher Permission
0029 AP Studio Art 2 D-2 (L)				S	
0031 Advanced Three-Dimensional Art I-I(L)	S				Introduction to Three- Dimensional Art (L)
0032 Advanced Three-Dimensional Art I-2 (L)		F			Introduction to Three- Dimensional Art I (L)
0033 Advanced Three-Dimensional Art II-I (L)		S			Introduction to Three- Dimensional Art II (L)
0034 Advanced Three-Dimensional ArtII-2 (L)			F		Introduction to Three- Dimensional Art III (L)
0038 Advanced Placement Studio Art 3 D-1 (L)	E				Pre-Requisite Teacher Permission
0039 Advanced Placement Studio Art 3 D-2 (L)	E				Pre-Requisite Teacher Permission

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## FINE ARTS - VISUAL ARTS

### **0020 Introduction to Two-Dimensional Art (L)**

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

### **0030 Introduction to Three-Dimensional Art (L)**

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

## **Advanced Two-Dimensional Art Courses**

### **0021 Advanced Two-Dimensional Art I-I (L)**

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

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

### **0022 Advanced Two-Dimensional Art I-2 (L)**

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

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

### **0023 Advanced Two-Dimensional Art II-I (L)**

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

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

### **0024 Advanced Two-Dimensional Art II-2 (L)**

This course builds on the sequential learning experiences of Advanced Two-Dimensional Art III that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. Students create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other



disciplines, and explore career options in visual art. Students will utilize art museums, galleries, studios, and community resources.

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

**0028 AP Studio Art 2 D-1 (L)**

**0029 AP Studio Art 2 D-2 (L)**

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

**Advanced Three-Dimensional Art Courses**

**0031 Advanced Three-Dimensional Art I-I (L)**

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

**0032 Advanced Three-Dimensional Art I-2 (L)**

This course builds on sequential learning experiences of Advanced Three-Dimensional Art I that encompass art history, art criticism, aesthetics, and production and will lead to the creation of portfolio quality works. This course

introduces students to three-dimensional design problems in the areas of ceramics, jewelry, sculpture, and textiles/fibers. The course will include additional units that are relief and/or free standing where basic elements of design (mass, space, texture, and composition) are stressed using a variety of materials such as wood, metal, plastics, clay, and fibers. Students create works of art, reflect upon the outcomes of those experiences, explore historical connections, write about the process, make presentations about their progress at regular intervals, work individually and in groups, find a direct correlation to other disciplines, and explore career options in visual art. Students utilize art museums, galleries, studios, and community resources. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media. Students will create works of art that demonstrate the ability to plan, organize, and complete a project. One semester each, one credit each, 10-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **0033 Advanced Three-Dimensional Art II-I (L)**

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

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

### **0034 Advanced Three-Dimensional Art II-2 (L)**

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

career options in visual art. Students will utilize art museums, galleries, studios, and community resources. Students will continue to develop skill in converting ideas into three-dimensional form as objects in a variety of media.

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

**0038 AP Studio Art 3 D-1 (L)**

**0039 AP Studio Art 3 D-2 (L)**

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

**World Languages Page 1 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0601 French I-1 0602 French I-2	Y				
0603 French II-1 0604 French II-2	Y				French I
0605 French III-1/ French 101 Ivy Tech 0606 French III-2/ French 102 Ivy Tech		Y			French II
7301 French IV-1/ French 201 Ivy Tech 7302 French IV-2/French 202 Ivy Tech					
0607 AP French IV-1 0608 AP French IV-2			Y		French III
0621 Spanish I-1 0622 Spanish I-2	Y				
0623 Spanish II-1 0624 Spanish II-2	Y				Spanish I
0625 Spanish III-1/Spanish 101 Ivy Tech 0626 Spanish III-2/Spanish 102 Ivy Tech		Y			Spanish II
7627 Spanish IV-1/Spanish 201 Ivy Tech 7628 Spanish IV-2/Spanish 202 Ivy Tech					
0627 AP Spanish IV-1 0628 AP Spanish IV-2			Y		Spanish III
0641 Japanese I-1 0642 Japanese I-2	Y				
0643 Japanese II-1 0644 Japanese II-2		Y			Japanese I
0645 Japanese III-1 0646 Japanese III-2			Y		Japanese II
0647 Japanese IV-1 0648 Japanese IV-2				Y	Japanese III

World Languages Page 2 of 2					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0631 Latin I-1 0632 Latin I-2	Y				
0633 Latin II-1 0634 Latin II-2		Y			Latin I
0635 Latin III-1/Latin 101 BSU 0636 Latin III-2/Latin 101 BSU			Y		Latin II
0637 Latin IV-1/Latin 102 BSU 0638 Latin IV-2/Latin 102 BSU				Y	Latin III

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

**WORLD LANGUAGES**

The study of world languages may help students improve English vocabulary and SAT scores.

**0601 & 0602 French I-1 & 2**

**0631 & 0632 Latin I-1 & 2**

**0621 & 0622 Spanish I-1 & 2**

**0641 & 0642 Japanese I-1 & 2**

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

**0603 & 0604 French II-1 & 2**

**0633 & 0634 Latin II-1 & 2**

**0623 & 0624 Spanish II-1 & 2**

**0643 & 0644 Japanese II-1 & 2**

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

**0605 & 0606 French III-1 & 2 / French 101&102 Ivy Tech**

**0635 & 0636 Latin III-1 & 2 / Latin 101 BSU**

**0625 & 0626 Spanish III-1 & 2 / Spanish 101&102 Ivy Tech**

**0645 & 0646 Japanese III-1 & 2**

In addition to previously learned communicative skills, Level III students will reinforce and further their knowledge of other disciplines, demonstrate an understanding of cultural differences, and show evidence of self-expression in the language. They will read authentic materials and short literary selections and write brief compositions. Two semesters, one credit each, 9-12<sup>th</sup> grades, elective. *Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.*

**7301 & 7302 French IV -1 & 2 / French 201 Ivy Tech**

**0607 & 0608 AP French IV-1 & 2**

**0637 & 0638 Latin IV-1 & 2 / Latin 102 BSU**

**7627 & 7628 Spanish IV – 1 & 2 /Spanish 201 Ivy Tech**

**0627 & 0628 AP Spanish IV-1 & 2**

**0647 & 0648 Japanese IV-1 & 2**

Level IV students will experience the target language by expressing and supporting reactions, judgments, and opinions. They will explore cultural products such as literary/historical selections and fine arts, in addition to practices common to the target language community. They will be able to respond to questions and create original works in both oral and written form in the target language. They will read longer, authentic materials and make judgments about their reading. In Latin, students will gain an understanding of Roman traditions, historical events, and major figures. Students taking French IV 1 & 2 AP, German IV 1&2 AP, or Spanish IV 1 & 2 AP will be required to take the AP exam. Two semesters, one credit each, 9-12<sup>th</sup> grades, elective. *Fulfills a World Language requirement for the Core 40 with Academic Honors diploma or counts as a Directed Elective or Elective for any diploma.*

**LANGUAGE ARTS Page 1 of 3**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0201 Honors English 9-1	F				Qualify for Honors Placement
0202 Honors English 9-2	S				Honors English 9-1
0211 English 9-1	F				
0212 English 9-2	S				English 9-1
0213 English/Language Arts Lab	F				Student did not meet test proficiency or recommended by counselor.
0214 English/Language Arts Lab	S				Student did not meet test proficiency or recommended by counselor.
0251 Honors English 10-1		F			Honors English 9-2
0252 Honors English 10-2		S			Honors English 10-1
0261 English 10-1		F			English 9-2
0262 English 10-2		S			English 10-1
0311 English 11-1			F		English 10-2
0312 English 11-2			S		English 11-1
7311 English 11-1 / English III Ivy Tech					
7312 English II-2 / English III Ivy Tech					
0331 AP English Language and Composition 1			F		
0332 AP English Language and Composition 2			S		English Language & Composition, AP 1
0341 AP English Literature and Composition 1			F		
0342 AP English Literature and Composition 2			S		English Literature & Composition, AP 1

**LANGUAGE ARTS Page 2 of 3**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
7351 English 12-1/ English 112 Ivy Tech					
7352 English 12-2/ English 112 Ivy Tech					
0351 English 12-1				F	English 11-2
0352 English 12-2				S	English 12-1
0333 Expository Writing					
0400 Creative Writing					
0401 Debate 1		F			Speech
0402 Debate 2		S			Debate 1
0431 Etymology		E			
0441 Journalism 1	F				
0442 Journalism 2	S				Journalism 1
0451 Student Publications/Newspaper Production 1		F			Advisor Approval
0452 Student Publications/Newspaper Production 2		S			Advisor Approval
0461 Student Publications/Yearbook Production 1		F			Advisor Approval
0462 Student Publications/Yearbook Production 2		S			Advisor Approval
0471 Mass Media		E			
0472 Mass Media		E			
0481 Speech 1/ com 101 Ivy Tech	F				



0482 Speech 2/ com 101 Ivy Tech	S			Speech 1
0502 American Literature			F	
0503 Biblical Literature			E	

<b>LANGUAGE ARTS Page 3 of 3</b>					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0506 Classical Literature			E		
0507 Developmental Reading	E				
0509 English (British) Literature				F	
0512 Composition			S		American Literature
0513 Advanced Composition				S	
0514 Twentieth Century Literature			E		
0515 Poetry			E		

**Explanations:**

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- Capital letter L indicates a laboratory course.
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- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## LANGUAGE ARTS

### **0201 Honors English 9-1**

### **0202 Honors English 9-2**

Freshman

Honors English integrates literature, composition, advanced vocabulary study, and oral communication. Students develop their use of language and literature as a tool for critical and analytical thinking and as a source of pleasure. It utilizes a literacy canon from different cultures and time periods of general literature for a source of understanding of the world. Emphasis is placed on various literary genres.

Composition components include persuasive writing, reasoning to support a hypothesis, research, special projects, related papers, annotated bibliographies, and use of the Modern Language Association (MLA) format. Oral communication emphasizes effective presentation of literature related projects, opportunities for impromptu, informative, and persuasive communications, and defense of point of view in discussion. One semester each, one credit each, meets 9<sup>th</sup> grade requirements. *Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.*

### **0211 English 9-1**

### **0212 English 9-2**

*English 9*, an integrated English course based on *Indiana's Academic Standards for English/Language Arts in Grade 9*, is a study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade--appropriate oral presentations and access, analyze, and evaluate online information.

- Recommended Grade Level: Grade 9
- Recommended Prerequisites: None
- Credits: 2 credits, a two--semester course with 1 credit per semester
- Fulfills an English/Language Arts requirement for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### **0213 English/Language Arts Lab**

### **0214 English/Language Arts Lab**

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

**0251 Honors English 10-1****0252 Honors English 10-2**

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

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

**0261 English 10-1****0262 English 10-2**

*English 10*, an integrated English course based on *Indiana's Academic Standards for English/Language Arts* in Grade 10, is a study of language, literature, composition, and oral communication with a focus on exploring universal themes across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write short stories, responses to literature, expository and argumentative/persuasive compositions, research reports, business letters, and technical documents. Students deliver grade--appropriate oral presentations and access, analyze, and evaluate online information.

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

**0311 English 11-1****0312 English 11-2**

English 11, an integrated English course based on the *Indiana's Academic Standards for English/Language Arts* in Grade 11, is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes in a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays ( e.g. analytical, persuasive, expository, summary), reflective compositions, historical investigation reports,

resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade--appropriate multimedia presentations and access, analyze, and evaluate online information.

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

**7311 English II-1/ English III Ivy Tech**

**7311 English II-2/ English III Ivy Tech**

**0331 AP English Language and Composition 1**

**0332 AP English Language and Composition 2**

AP English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and in becoming skilled writers who compose for a variety of purposes. Both their writing and reading will make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way conventions and the resources of language contribute to effectiveness in writing.

The AP English Language and Composition course allows students to write in a variety of forms—narrative, exploratory, expository, and argumentative—and on a variety of subjects. Its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers.

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

**0341 AP English Literature and Composition 1**

**0342 AP English Literature and Composition 2**

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

Writing will focus on the critical analysis of literature and will include expository, analytical, and argumentative essays. Although critical analysis will make up the bulk of student writing for the course, well-constructed, creative writing assignments may help students understand how literature is written. The goal of both types of writing assignments is to increase students' ability to explain clearly what they understand about literary works and why they interpret them as they do. Students will be expected to take the AP exam upon completion of the course. One semester each, one credit each, 11-12<sup>th</sup> grades, meets 12<sup>th</sup> grade requirements.

A Core 40, AHD, and THD course.

**0351 English 12-1**

**0352 English 12-2**

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

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

**7351 English 12/English 112 Ivy Tech**

**7352 English 12/ English 112 Ivy Tech**

**0333 Expository Writing**

**0400 Creative Writing**

**0401 Debate 1**

**0402 Debate 2**

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

**0431 Etymology**

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

**0441 Journalism 1****0442 Journalism 2**

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

**0451 Student Publications/Newspaper Production 1****0452 Student Publications/Newspaper Production 2**

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

**0461 Student Publications/Yearbook Production 1****0462 Student Publications/Yearbook Production 2**

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

**0471 Mass Media 1****0472 Mass Media 2**

Mass Media provides a study of television, film, newspaper, radio, and videotape as sources of information, persuasion, and creative expression. This course helps students develop an awareness of audience and purpose in evaluating mass media, as well as in producing their own media productions. It will also help

students to judge media critically and understand the use of persuasive language and strategies. Opportunities are provided for students to generate material for mass media, such as radio and television material, slide-tape presentations, film, and newspaper articles. One semester, one credit, 10-12<sup>th</sup> grades, elective. *This course does not meet English credit requirements for graduation. This course counts only as an elective credit for General, Core 40, AHD, and THD.*

**0481 Speech 1/ COM 101 Ivy Tech**

**0482 Speech 2/ COM 101 Ivy Tech**

Speech provides the study of and practice in the basic principles and techniques of effective oral communication. Students have opportunities to make different types of oral presentations including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students are given opportunities to express subject matter knowledge and content through creative, analytical, and expository writing, as well as reading a variety of literary genres. This course emphasizes research using technology and careful organization and preparation. Students also practice and develop critical listening skills.

Speech 2 will focus on leadership development, listening skills, oral interpretation, parliamentary procedure, discussion, research method, and oral debate. One semester each, one credit each, 9-12<sup>th</sup> grades, elective. *Each can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.*

**0502 American Literature**

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

**0503 Biblical Literature**

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

### **0506 Classical Literature**

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

### **0507 Developmental Reading**

This course is for students who need additional support in vocabulary development and reading comprehension. This course will focus on the Indiana Academic Standards for reading (standards 1, 2, 3). The nature of this course allows for successive semesters of instruction at advanced levels up to 8 elective credits. One semester each, one credit each, for students who did not meet required test proficiency or who are placed by teacher/counselor recommendation, 9 – 12<sup>th</sup> grade. *This course does not meet English credit requirements for graduation. This course counts only as an elective credit for General, Core 40, AHD, and THD.*

### **0509 English (British) Literature**

English Literature provides an accelerated survey of representative literature produced by English-speaking authors, including those in the British Isles as well as those in the former British colonies. This course includes the study of major British authors from the Anglo-Saxon period to the present, literary movements, and intellectual trends. It also provides an examination of the contributions of British authors to specific literary genres. Writing and classroom discussion activities include opportunities for students to respond analytically and reflectively to the literature. One semester, one credit, 11<sup>th</sup>-12<sup>th</sup> grades, meets 12<sup>th</sup> grade requirements. (Can be taken at another grade level with teacher recommendation.) *A Core 40, AHD or THD course.*

### **0512 Composition**

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



can be taken at another grade level with teacher recommendation.) *Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.*

### **0513 Advanced Composition**

Advanced Composition further develops and refines writing skills introduced in other composition courses. This course emphasizes research using technology and careful organization and preparation. This course also provides students frequent opportunities to write. Techniques of persuasive writing and formal argument are studied, and increased emphasis is placed on language and style. Students will do presentations critiquing their own writing. Students will also read and evaluate literary samples of good writing to enhance their own writing. Students in Advanced Composition will be required to write a research paper. English Literature is a pre-course recommendation for enrolling in Advanced Composition. It is recommended that students should have received an A or B in American Literature and Composition to be enrolled in this course. One semester, one credit, 11<sup>th</sup>-12<sup>th</sup> grades, meets 12<sup>th</sup> grade requirements. (This can be taken at another grade level with teacher recommendation.) *Fulfills an English/Language Arts requirement for the Core 40, AHD, and THD diplomas.*

### **0514 Twentieth Century Literature**

This course will provide a survey of the literature produced from approximately 1900 to the present. The course may be organized chronologically or thematically; it may also be organized to concentrate on specific authors of the period or specific literary genres. Emphasis may be placed on early twentieth century works (modern period) or more recent works (contemporary period). One semester, one credit, 11<sup>th</sup>-12<sup>th</sup> grades, elective. *Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.*

### **0515 Poetry**

Poetry will provide a study of a variety of types, including epic, romance, lyric, and dramatic poetry. Representative examples of these major types of poetry and their variations are included in this course. Not only does this course focus upon interpretation, but also upon a variety of structures, devices, and themes that differentiate one type of poetry from another. Reading poetry for pleasure is emphasized. One semester, one credit, 11-12<sup>th</sup> grades, elective. *Can fulfill an English 11 or 12 credit. A Core 40, AHD, and THD course.*

**MATHEMATICS Page 1 of 1**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0931 Integrated Mathematics I					
0932 Integrated Mathematics 2					
0933 Integrated Mathematics II-I					
0934 Integrated Mathematics II-II					
0935 Integrated Mathematics III-I					
0936 Integrated Mathematics III-II					
0941 Algebra I-1 0942 Algebra I-2	Y				
0945 Algebra I Lab 0946 Algebra I Lab	E				Student did not meet test proficiency or recommended by counselor.
0947 Math Lab 0948 Math Lab		E			Algebra I and Counselor Approval
0951 Algebra II-1 0952 Algebra II-2		Y			Algebra I
0953 Honors Algebra II-1 0954 Honors Algebra II-2		Y			Algebra I
0961 Geometry 1 0962 Geometry 2	Y				Algebra I
0963 Probability & Statistics			E		Algebra I, Algebra II
0964 Finite Mathematics/ Math 135 Ivy Tech			E		Algebra I, Algebra II
0971 Pre-Calculus/Trig. 1 0972 Pre-Calculus/Trig. 2			Y		Algebra I, Algebra II, Geometry
0973 Pre-Calculus/Trig. 1/Math 136 Ivy Tech 0974 Pre-Calculus/Trig. 2/Math 137 Ivy Tech			Y		Algebra I, Algebra II, Geometry
0975 AP Statistics 1 0976 AP Statistics 2			Y		
7981 Calculus I AB/MATH 2II Ivy Tech					
7982 Calculus 2 AB/MATH 2II Ivy Tech					
0981 AP Calculus 1 AB 0982 AP Calculus 2 AB				Y	Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry
0983 AP Calculus, 1 BC 0984 AP Calculus, 2 BC				Y	Algebra I, Algebra II, Geometry, Pre-Calculus/Trigonometry

4570 AP Computer Science A 4571 AP Computer Science A			Y	Y	Digital Citizenship, Algebra I & II
4568 AP Computer Science Principles 1 4569 AP Computer Science Principles 2			Y	Y	Algebra I

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- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## MATHEMATICS

### **0931 Integrated Mathematics 1**

### **0932 Integrated Mathematics 2**

Integrated Mathematics I formalizes and extends the mathematics students learned in the middle grades. The critical areas deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Integrated Mathematics I use properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grades. The final unit in the course ties together the algebraic and geometric ideas studied. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. Recommended Grade Level: 9, 10, 11, 12; Recommended Prerequisites: none; Credits: 2 semester course, 1 credit per semester; Fulfills the Algebra I/Integrated Mathematics I requirement for all diplomas Students pursuing Core 40, Core 40 with academics Honors, or Core 40 with Technical Honors diplomas should receive credit for Integrated Mathematics I by the end of Grade 9.

### **0933 Integrated Mathematics II-I**

### **0934 Integrated Mathematics II-II**

Integrated Mathematics II focuses on quadratic expressions, equations, and functions; by comparing their characteristics and behavior to those of linear and exponential relationships from Integrated Mathematics I. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods, including their use in making and evaluating decisions. The study of similarity leads to an understanding of right triangle trigonometry and connects to quadratics through Pythagorean relationships. Circles, with their quadratic algebraic representations, rounds out the course. The eight Process Standards of Mathematics apply throughout the course. Together with the content standards, the process Standards prescribe that students experience mathematics as a coherent, useful,

and logical subject that makes use of their ability to make sense of problem situations. Recommended Grade Level: 9, 10, 11, 12; Recommended Prerequisites: Integrated Mathematics I; Credits: 2 semester course, 1 credit per semester; Counts as a Mathematics Course for all diplomas; Fulfills the Geometry/Integrated Mathematics II requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas.

**0935 Integrated Mathematics III-I**

**0936 Integrated Mathematics III-II**

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

**0941 Algebra I-1**

**0942 Algebra I-2**

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

**0945 Algebra I Lab**

**0946 Algebra I Lab**

Algebra I Lab is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: Relationships between Quantities and Reasoning with Equations; Linear and Exponential Relationships; Descriptive Statistics; Expressions and Equations; and Quadratic Functions and Modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

- Credits: A two credit course, one credit per semester

- Counts as a Mathematics Course for the General Diploma only or as an Elective for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Algebra Enrichment is designed as a support course for Algebra I. As such, a student taking Algebra Enrichment must also be enrolled in Algebra I during the same academic year.

### **0947 Math Lab**

### **0948 Math Lab**

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

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

### **0953 Honors Algebra II-1**

### **0954 Honors Algebra II-2**

This course, through an accelerated pace, covers all topics in Algebra II and allows time for enrichment of those topics as well as a rigorous, in-depth study of additional concepts. This course will advance student knowledge of theory, development of formulas, and application of concepts. An introduction to limits and trigonometry will be included. Students must be selected for the Honors program or admitted based on teacher recommendation. Students who completed Algebra I at the middle school level must have obtained a grade of "C" or higher and passed the Algebra I End-of-Course Assessment to be considered for enrollment. One semester each, one credit each, 10-12<sup>th</sup> grades. *A Core 40, AHD, and THD course.*

### **0951 Algebra II-1**

### **0952 Algebra II-2**

This course will include the properties and operations of real numbers. The course will provide for, but not be limited to, student learning in the use and understanding of functions and functional notation, the use of algebraic theorems and algorithms, the use of graphing and other methods of solving open sentences of higher order including the introduction and use of conics, series, exponential functions, the complex number system, and other advanced algebraic concepts. One semester each, one credit each, 10-12<sup>th</sup> grades. *A Core 40, AHD, and THD course.*

**0961 Geometry 1****0962 Geometry 2**

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

**0963 Probability and Statistics**

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

**0964 Finite Mathematics/MATH 135 Ivy Tech**

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

**0971 Pre-Calculus/Trigonometry 1****0972 Pre-Calculus/Trigonometry 2**

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

**0973 Pre-Calculus/Trigonometry 1/MATH 136 Ivy Tech****0974 Pre-Calculus/Trigonometry 2/MATH 137 Ivy Tech**

This course, through an accelerated pace, covers all of the topics in Pre-Calculus/Trigonometry 1& 2, and allows time for a rigorous in-depth study of additional concepts. A functional approach will provide for the integration of trigonometric concepts, relationships of equations and graphs, and applications to real world problems. The use of appropriate technology will be essential as students refine their ability to solve and interpret equations and also as they broaden their understanding of functions and their graphs. Students will further develop an appreciation of the contributions made by mathematicians such as De Moivre and Euler. Topics include relations and functions, logarithmic and exponential functions, trigonometry in triangles, trigonometric functions, trigonometric identities and equations, polar coordinates and complex numbers, sequences, series, and data analysis. Students in this course will use a TI-84 Silver + calculator. The course objectives and competencies will include those for trigonometry. Algebra I Honors, Geometry Honors, Algebra II Honors (grade of C or better) or teacher recommendation is a pre-course recommendation. One semester each, one credit each, 11-12<sup>th</sup> grades. *A Core40, AHD, and THD course.*

### **0975 AP Statistics 1**

### **0976 AP Statistics 2**

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

- Recommended Grade Level: Grades 11 or 12
- Recommended Prerequisite: Algebra II or Integrated Mathematics III
- Credits: 1 or 2 credit course, 1 credit per semester. Due to the level of rigor, it is recommended that AP Statistics be offered as a 2 semester, 2 credit course.
- Counts as a Mathematics Course for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- Qualifies as a quantitative reasoning course

### **7981 Calculus 1 AB/ MATH 211 Ivy Tech**

### **7982 Calculus 2 AB/ MATH 211 Ivy Tech**

### **0981 AP Calculus 1 AB**

### **0982 AP Calculus 2 AB**

Calculus Advanced Placement is a course that provides students with the content established by the College Board.

Students will explore topics that include limits, continuity, derivatives, definite integrals, and techniques of integration involving rational, trigonometric, logarithmic, and exponential functions. The course should also include applications of the derivative, the integral, and theory of calculus. Students will use graphing calculators. Students will be expected to take the AP Exam upon completion of this course. One semester each, one credit each, 12<sup>th</sup> grade. *A Core 40, AHD, or THD course.*

**0983 AP Calculus 1 BC****0984 AP Calculus 2 BC**

This course will provide students with the content which has been established by the College Board. Generally, topics will include limits, continuity, derivatives, definite integrals, and techniques of integration involving rational, trigonometric, logarithmic, and exponential functions.

The course should also include applications of the derivative, the integral, and theory of calculus. Students will be expected to take the AP Exam upon completion of this course and will be primarily concerned with an intuitive understanding of the concepts of calculus and experience with its methods and applications. Students will use graphing calculators. One semester each, one credit each, 12<sup>th</sup> grade. *A Core 40, AHD, and THD course.*

**4570 AP Computer Science A****4571 AP Computer Science A**

AP Computer Science A is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The curriculum for AP Computer Science A is compatible with many CSI courses in colleges and universities. Recommended Grade Level: 11, 12; Recommended Prerequisites: Digital Citizenship, Algebra I, and Algebra II; Credits: 2 semester course, 1 credit per semester; Counts as a Mathematics or Elective for all diplomas; Qualifies as a quantitative reasoning course.

**4568 AP Computer Science Principles 1****4569 AP Computer Science Principles 2**

The AP Computer Science Principles course will introduce you to the essential ideas of computer science and show how computing and technology can influence the world around you. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. The course is not intended to be used as a dual credit course. Recommended Grade Level: 11, 12; Recommended Prerequisite: Algebra I; Credits: 2 semester course, 1 credit per semester; Counts as a Math Course for all diplomas



<b>MULTI-DISCIPLINARY Page 1 of 1</b>					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
2001 Post-secondary Credit 1			E		See Course Description.
2002 Post-secondary Credit 2					
2011 Cadet Teaching 2 AM			S		Recommendation by Counselor
2012 Cadet Teaching 2 PM			S		
2015 Career Information & Exploration 1			Y		Recommendation by counselor to JAG program
2016 Career Information & Exploration 2					
2029 Foreign Exchange		E			See Course Description.
2061 MCJROTC Leadership Training I-1	Y				
2062 MCJROTC Leadership Training I-2					
2071 MCJROTC Leadership Training II-1		Y			MCJROTC Leadership Training I
2072 MCJROTC Leadership Training II-2					
2081 MCJROTC Leadership Training III-1			Y		MCJROTC Leadership Training II
2082 MCJROTC Leadership Training III-2					
2091 MCJROTC Leadership Training IV-1				Y	MCJROTC Leadership Training III
2092 MCJROTC Leadership Training IV-2					
2059 Student Assignment 1	E				Recommendation of Instructor
2060 Student Assignment 2					
0521 Peer Tutoring 1	F				
0521 Peer Tutoring 2	S				
2095 MCJROTC Staff					
2096 MCJROTC Staff					

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## MULTI-DISCIPLINARY

### **2001 Post-secondary Credit Program 1**

### **2002 Post-secondary Credit Program 2**

This opportunity is designed to give high school students secondary as well as post-secondary credit in approved courses not currently being taught in the high school. Students who intend to enroll in an eligible post-secondary institution under this program must submit an application form within the timeline established by the school. The student or the student's parent or guardian must assume all financial responsibility imposed by the eligible post-secondary institution for tuition and enrollment fees, as well as any and all transportation costs. Students may request an application form from his or her guidance counselor. 11-12<sup>th</sup> grades, elective.

### **2011 Cadet Teaching 2 AM**

### **2012 Cadet Teaching 2 PM**

Experience is limited to grades K-5. This course is designed as a field experience for students who are interested in teaching as a profession and are above average in scholarship, citizenship, and attendance. While observing and assisting an experienced teacher, the student gains a better understanding of the role of the teacher and of his/her own aptitude for teaching. Two hours a day are required for the course. Each student must provide needed transportation to the elementary school assignment. Students must submit an application form and be approved by the high school contact person. Students may request an application form from his or her guidance counselor One credit per semester, up to 4 credits. 11-12<sup>th</sup> grades, elective.

### **2015 Career Information and Exploration 1**

### **2016 Career Information and Exploration 2**

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

### **2029 Foreign Exchange**

Students participating in an Indiana-approved foreign exchange program may enroll in foreign exchange academic courses for credit at the home high school. Foreign titles should correspond to existing courses in the Muncie Community Schools' curriculum. Application should be finalized before departure to the foreign

country if possible, but must be finished within three weeks of enrollment in the foreign school. For credit to be awarded, the student must provide the home high school with an official foreign transcript showing clearly the grades and an interpretation of the grading system, as well as verifying the number of instructional hours per course. Certifying credits is done by the home high school. Students may request on the same application to have recognition of the foreign exchange experience recorded on the official high school transcript without credit. (Students may request an application form from his or her guidance counselor.) 10-12<sup>th</sup> grades, elective. *Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.*

**2059 Student Assignment 1**

**2060 Student Assignment 2**

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

**MCJROTC/ASPE**

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

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

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

**2061 MCJROTC Leadership Training I-1**

**2062 MCJROTC Leadership Training I-2**

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

**2071 MCJROTC Leadership Training II-1**

**2072 MCJROTC Leadership Training II-2**

This is a second-year course which builds on the basic knowledge gained in the introductory courses. This involves a more in-depth study of the introductory course subjects. Leadership positions in the cadet organization are assigned. Instructor approval is required for enrollment. 10-12<sup>th</sup> grades, two semesters, one credit each,

elective. *Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.*

**2081 MCJROTC Leadership Training III-1**

**2082 MCJROTC Leadership Training III-2**

This is a third-year course which builds on the intermediate knowledge gained in MCJROTC I and II. Focus on citizenship development continues as well as instruction in planning and coordinating activities. Leadership and staff positions in the cadet battalion are assigned. Instructor approval is required for enrollment. 11-12<sup>th</sup> grades, two semesters, one credit each, elective. *Credits from this course count as elective credits for the Core 40, AHD, and THD or counted as a Career Academic Sequence or Flex Credits for the General Diploma.*

**2091 MCJROTC Leadership Training IV-1**

**2092 MCJROTC Leadership Training IV-2**

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

**2095 MJROTC Staff 1**

**2096 MJROTC Staff 2**

**0520 Peer Tutoring 1**

**0521 Peer Tutoring 2**

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

<b>PHYSICAL EDUCATION Page 1 of 1</b>					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
1101 Physical Education I (L)	E				
1102 Physical Education II (L) Fit 100 Ivy Tech	E				
1109 Health & Wellness Education (L) Fit 100 Ivy Tech	E				
1129 Elective PE, Leisure Sports (L)		E			Physical Education I & II
1131 Elective PE, Physical Conditioning 1 (L)		F			Physical Education I & II
1132 Elective PE, Physical Conditioning 2 (L)		S			Physical Education I & II

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

**HEALTH, SAFETY, AND PHYSICAL EDUCATION**

**MCJROTC/ASPE**

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

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

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

**1101 Physical Education I 1(L)**

This course emphasizes health-related fitness and developing the skills and habits necessary for a lifetime of activity. It includes skill development and the application of rules and strategies of complex difficulty in at least three of the following different movement forms: health-related fitness activities (cardio-respiratory endurance,

muscular strength and endurance, flexibility, and body composition), aerobic exercise, team sports, individual and dual sports, outdoor pursuits, aquatics, dance, and recreational games. One semester, one credit, 9-12<sup>th</sup> grade, required. Fulfills part of the Physical Education requirement for the *Core 40, AHD, THD, and General Diploma*.

### **1102 Physical Education II (L)/ Fit 100 Ivy Tech**

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

### **1109 Health & Wellness Education/Fit 100 Ivy Tech**

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

### **1129 Elective Physical Education/Leisure Sports (L)**

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

### **1131 Elective Physical Education /Physical Conditioning 1 (L)**

### **1132 Elective Physical Education/Physical Conditioning 2 (L)**

This course includes beginning instruction in the development of one's physical capabilities, introduction to the use of the Universal Machine, and basic techniques of free weight lifts. Information is discussed as to physiological reasons for muscle growth, and the adverse effects of drugs involved in muscle gain are studied.

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

**SCIENCE Page 1 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
<b>BIOLOGICAL SCIENCE</b>					
1201 Honors Biology I-1 (L) 1202 Honors Biology I-2 (L)	Y				Qualify for Honors Placement
1211 Biology I-1 (L) 1212 Biology I-2 (L)	Y				
1231 Life Science 1 (L)	E				
7401 Biology II-1 (L)/Bio 101 Ivy Tech 7402 Biology II-2 (L)/Bio 101 Ivy Tech			Y		Biology I
AP Biology 1 (L) AP Biology 2 (L)			Y		Biology I and Chemistry I
<b>OTHER BIOLOGY COURSES</b>					
1261 Botany 1 (L) 1262 Botany 2 (L)			Y		Biology I
1269 Genetics (L) 1279 Human Physiology (L)			E		Biology I
1281 Zoology 1 (L) 1282 Zoology 2 (L)			Y		Biology I
<b>EARTH/SPACE SCIENCE</b>					
1291 Earth and Space Science I-1 (L) 1292 Earth and Space Science I-2 (L)	Y				
1299 Astronomy (L)			E		One year Earth & Space Science and Algebra I
<b>PHYSICAL SCIENCE</b>					
1301 Chemistry I-1 (L)/CHEM 101 Ivy Tech 1302 Chemistry I-2 (L)/CHEM 101 Ivy Tech		Y			Qualify for Honors Placement

<b>SCIENCE Page 2 of 2</b>					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
1311 Chemistry I-1 (L) 1312 Chemistry I-2 (L)		Y			Algebra I
1321 AP Chemistry I-1 (L) 1322 AP Chemistry I-2 (L)			Y		Chemistry I
1331 Chemistry II 1 (L) 1332 Chemistry II-2 (L)			Y		Chemistry I
1341 Physics I-1 (L) 1342 Physics I-2 (L)			Y		Algebra I Algebra II Geometry 1 & 2
1349 AP Physics I-1: Algebra-Based (L) 1350 AP Physics I-2: Algebra-Based (L)		Y			Algebra II (or concurrently taking)
1351 AP Physics II-1: Algebra-Based (L) 1352 AP Physics II-2: Algebra-Based (L)			Y		Physics AP I
1361 Physical Science 1 (L)	E				
INTEGRATED SCIENCE					
1383 Environmental Science 1 (L) 1384 Environmental Science 2 (L)			Y		2 Years of CORE 40 and AHD Science
1385 Integrated Chemistry-Physics 1 (L) 1386 Integrated Chemistry-Physics 2 (L)		Y			Algebra I and One Year of Core 40 Science

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma



## SCIENCE

### BIOLOGICAL SCIENCE COURSES

#### **1201 Honors Biology I-1 (L)**

#### **1202 Honors Biology I-2 (L)**

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

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

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

#### **1211 Biology I-1 (L)**

#### **1212 Biology I-2 (L)**

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

#### **1231 Life Science (L)**

Life science will provide a basic biology course designed to provide students with opportunities to perform laboratory and field investigations of those biological concepts and principles which affect their well-being, as well as that of their community and other living organisms in their environment. The course will develop those problem resolution skills and strategies that students will need to be effective citizens, consumers, and workers in a scientific and technological society. One semester, one credit, 9-12<sup>th</sup> grades, elective. *Fulfills a Science requirement for the General Diploma only or counts as an Elective for the Core 40, AHD, and THD.*

#### **7401 Biology II 1 (L)/BIO 101 Ivy Tech**

#### **7402 Biology II 2 (L)/BIO 101 Ivy Tech**

Pre-requisite: Biology I. This course provides students with extended opportunities to pursue laboratory (25% of the classroom experience), field, and literature investigations into the internal structures, functions, and processes of living organisms and the environmental interactions of these organisms. Two semesters, two credits, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course.*

**1253 AP Biology 1 (L)**

**1254 AP Biology 2 (L)**

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

**1261 Botany 1 (L)**

**1262 Botany 2 (L)**

Pre-requisite: Biology I.

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

**1269 Genetics (L)**

Pre-requisite: Biology I. In this course students will utilize a laboratory setting (25% of class experience) to examine human inheritance and molecular genetics. As part of the investigative nature of this course, students will:

- Recognize modes of transmission and detail the biochemical pathways of genetic diseases.
- Examine the genetic blueprint and perform DNA analysis.
- Recognize the impact of the environment on the human genome.
- Distinguish between different types of gene technology and perform selected experiments to demonstrate the process.
- Analyze current trends and technology in the field of genetics and evaluate the bioethics of these societal issues. One semester, one credit, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course.*

**1279 Human Physiology (L)**

Pre-requisite: Biology I. This course focuses on the functional mechanisms of the human body in maintaining homeostasis. Complementarity of structure and function is stressed and the interrelationships of body organ systems are addressed. Laboratory investigations (25% of class experience) include analysis of specific body functions using lab equipment and computer software. Students should be able to:

- Relate structure to the function of each system of the human body.
- Demonstrate a comprehensive understanding of each system of the human body.
- Recognize the importance of homeostasis in maintaining the human body.
- Analyze data and predict outcomes of selected body functions.

One semester, one credit, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course.*

### **1281 Zoology 1 (L)**

### **1282 Zoology 2 (L)**

Pre-requisite: Biology I.

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

## **EARTH/SPACE SCIENCE COURSES**

### **1291 Earth and Space Science I-1 (L)**

### **1292 Earth and Space Science I-2 (L)**

This course should provide a study of the earth's lithosphere, atmosphere, and hydrosphere and its celestial environment. Laboratory investigations will comprise 25% of the class experience and emphasize the study of the energy at work in forming and modifying earth materials, landforms, and continents through geological time. Students should have opportunities to gain an understanding of the history of the development of the earth/space sciences, to explore the uses of knowledge of the earth and its environment in various careers, and to cope with problems related to personal needs and social issues. Two semesters, two credits, 9 -12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course.*

### **1299 Astronomy (L)**

Pre-requisite: One year of Earth and Space Science and Algebra I. This course is a study of the universe— its composition, structure, apparent motions, and characteristics. This course will investigate how man's understanding of the universe is changing. Techniques of measurement in astronomy will be included in

laboratory investigations, which comprise 25% of the classroom experience. Use of the planetarium will be an integral part of this course. One semester course, one credit, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course.*

## **PHYSICAL SCIENCE COURSES**

### **1301 Chemistry I-1 (L)/ CHEM 101 Ivy Tech**

### **1302 Chemistry I-2 (L)/ CHEM 101 Ivy Tech**

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

### **1311 Chemistry I-1 (L)**

### **1312 Chemistry I-2 (L)**

Pre-requisite: Algebra I. With an environmental emphasis and an emphasis on practical daily usage, this course will allow students to synthesize useful models of the structure of matter and the mechanisms of its interactions through laboratory investigations (25% of class work) of matter and its chemical reactions. This course is organized around the concepts of atomic structure, bonding, the quantitative study of chemical reactions and other changes that accompany chemical reactions.

Students should have the opportunity to gain an understanding of the history of chemistry, to explore the uses of chemistry in various careers, to cope with chemical questions and problems related to personal needs and social issues, and to learn and practice laboratory safety. Two semesters, two credits, 10-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course.*

### **1321 AP Chemistry I-1 (L)**

### **1322 AP Chemistry I-2 (L)**

Pre-requisite: Chemistry I. Advanced Placement Chemistry is for students preparing for the AP Exam in chemistry. This course follows College Board entrance examination guidelines for advanced placement chemistry. The emphasis of instruction will be on the development of a comprehensive understanding and preparation in chemistry concepts using mathematical formulations, chemical calculations, and extended laboratory work. Two semesters, two credits, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course.*

**1331 Chemistry II-1 (L)****1332 Chemistry II-2 (L)**

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

**1341 Physics I-1 (L)****1342 Physics I-2 (L)**

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

**1349 AP Physics, I-1: Algebra-based (L)****1350 AP Physics, I-2: Algebra-based (L)**

Pre-requisite: Algebra II or concurrently enrolled in Algebra II. Advanced Placement Physics I is for students preparing for the AP Exam in AP Physics I. This course follows College Board entrance examination guidelines for AP Physics I. This course is equivalent to a first semester college course in algebra-based physics. The course covers Newtonian mechanics; work, energy, and power; and mechanical waves and sound. It also introduces electrical circuits. Two semesters, two credits, 10-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course.*

**1351 AP Physics, II-1: Algebra-based (L)****1352 AP Physics, II-2: Algebra-based (L)**

Pre-requisite: AP Physics I.  
Advanced Placement Physics II is for students preparing for the AP Exam in AP Physics II. This course follows College Board entrance examination guidelines for AP Physics II. This course is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. Two semesters, two credits, 11-12<sup>th</sup> grades, elective. *A Core 40, AHD, and THD course. A Quantitative Reasoning course.*

**INTEGRATED SCIENCE COURSES**

**1383 Environmental Science, 1 (L)****1384 Environmental Science, 2 (L)**

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

**1385 Integrated Chemistry-Physics 1 (L)****1386 Integrated Chemistry-Physics 2 (L)**

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

**SOCIAL STUDIES Page 1 of 1**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
1405 Geography and History Of the World 1	F				
1406 Geography and History Of the World 2	S				
1407 H Geography 1					
1408 H Geography 2					
1411 World History and Civilization 1	F				
1412 World History and Civilization 2	S				
1576 AP World History 1					
1577 AP World History 2					
1431 U.S. History 1			F		
1432 U.S. History 2			S		U.S. History 1
7431 U.S. History1/HIST 101 Ivy Tech					
7432 U.S. History 2/HIST 102 Ivy Tech					
1441 AP U.S. History 1			F		
1442 AP U.S. History 2			S		U.S. History, AP 1
1459 U.S. Government			E		
7659 Government/POLS 101 Ivy Tech					
1469 AP Government and Politics: United States 1			F		
1470 AP Government and Politics: United States 2			S		AP Government and Politics: United States 1
1479 Economics			E		
1489 AP Microeconomics 1			F		
1490 AP Macroeconomics 2			S		
1499 Modern World Civilization			E		
1509 Psychology		E			
7612 Psychology/ PSYCH 101 Ivy Tech					
1511 AP Psychology - 1			F		
1512 AP Psychology - 2			S		AP Psychology 1
1516 Ethnic Studies					
1518 Indiana Studies					
1519 Sociology			E		

1538 Topics in History 1					
1539 Topics in History 2					

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F – Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma

## SOCIAL STUDIES

### **1405 Geography and History of the World 1**

### **1406 Geography and History of the World 2**

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

### **1407 H Geography/ HIST 1**

### **1408 H Geography/ HIST 2**

### **1411 World History and Civilization 1**

### **1412 World History and Civilization 2**

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

### **1576 AP World History 1**

### **1577 AP World History 2**

AP World History is a course based on the content established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. AP World History focuses on developing students' abilities to think conceptually about world history from approximately 8000 BCE to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance – focusing on the environment, cultures, state-building, economic systems, and social structures – provide areas of historical inquiry for investigation throughout the course. AP World History encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. Recommended Grade Level: none; Recommended Prerequisites:



none; Students should be able to read a college level textbook and write grammatically correct, complete sentences; Credits: 2 semester course, 1 credit per semester; Fulfills a Social Studies requirement for all diplomas.

### **1431 U.S. History 1**

### **1432 U.S. History 2**

This course emphasizes national development in the late nineteenth and twentieth centuries that should build upon concepts developed in previous studies of American history. In this course, students will be given the opportunity to identify and review significant events and movements in the early development of the nation. Students will gain an understanding of the interaction of historical events to geographic, social, and economic influences on national development in the later nineteenth and the twentieth centuries. A topical, chronological, or comparative approach can be used in developing certain themes from America's past as they relate to life in Indiana and the United States today. Two semesters, one credit each, 11-12<sup>th</sup> grades, required. *Fulfills the U.S. History requirement of the Core 40, AHD, THD, and General Diploma.*

### **7431 U.S. History 1/ HIST 101 Ivy Tech**

### **7432 U.S. History 2/ HIST 102 Ivy Tech**

### **1441 AP U.S. History 1**

### **1442 AP U.S. History 2**

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

### **1459 U.S. Government**

United States Government will provide a framework for understanding the nature and the importance of responsible civic participation and for learning the rights and responsibilities of individuals in a constitutional democracy. The course will enable students to explore the historic origins and evolution of political philosophies into contemporary political and legal systems. Constitutional structure and the processes of the legislative, executive and judicial branches of the national, state and local levels of government will be examined. Students should draw conclusions about the impact and interrelationships of history, geography and economics upon our system of government. They should also be able to demonstrate an understanding of the governmental structures of the United States and other political systems as well as the relationship of American government in world affairs. The study of United States government will offer students opportunities to

develop knowledge, inquiry skills, and the means to preserve and improve our constitutional democracy. One semester, one credit, 11-12<sup>th</sup> grades, required. *Fulfills the U.S. Government requirement of the Core 40, AHD, THD, and General Diploma.*

### **7659 Government/POLS 101 Ivy Tech**

#### **1469 AP Government and Politics: United States 1**

#### **1470 AP Government and Politics: United States 2**

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

#### **1479 Economics**

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

#### **1489 AP Microeconomics 1**

#### **1490 AP Macroeconomics 2**

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

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

place between countries. Students are required to take the AP Exam at the conclusion of the semester. *A Quantitative Reasoning course.*

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

### **1499 Modern World Civilization**

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

### **1509 Psychology**

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

### **7612 Psychology/ PSYCH 101 Ivy Tech**

#### **1511 AP Psychology 1**

#### **1512 AP Psychology 2**

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

### **1516 Ethnic Studies**

Ethnic Studies provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative

approach to the study of patterns of cultural development, immigrations, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States. Recommended Grade Level: none; Recommended Prerequisites: none; Credits: 1 semester course, 1 credit; Fulfills an elective for the Core 40, AHD, THD, and General Diploma.

### **1518 Indiana Studies**

### **1519 Sociology**

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

### **1538 Topics in History I**

### **1539 Topics in History 2**

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

**ENGINEERING AND TECHNOLOGY EDUCATION Page 1 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0811 Communication Systems	F				
0812 Introduction to Communications	S				
0821 Introduction to Design Processes		E			
0822 Technology Enterprise		E			
0831 Computers in Design and Production 1	F				
0832 Computers in Design and Production 2	S				Computers in Design and Production 1
0851 Technology Systems			F		
0861 Introduction to Manufacturing	F				
0813 HIRE I-1 Introduction to Advanced Manufacturing and Logistics			F		
0814 HIRE I-2 Introduction to Advanced Manufacturing and Logistics			S		
0883 Transportation Systems	F				
0884 Introduction to Transportation	S				
0891 Construction Systems	F				
0892 Introduction to Construction	S				
0894 Introduction to Engineering Design 1 (PLTW Course)	F				
0895 Introduction to Engineering Design 2 (PLTW Course)	S				Introduction to Engineering Design 1
0898 Principles of Engineering 1 (PLTW Course)		F			
0899 Principles of Engineering 2 (PLTW Course)		S			Principles of Engineering 1

**ENGINEERING AND TECHNOLOGY EDUCATION Page 2 of 2**

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
0896 Digital Electronics 1 (PLTW Course)			F		Principles of Engineering 2
0897 Digital Electronics 2 (PLTW Course)			S		Digital Electronics 1
0900 Civil Engineering and Architecture 1 (PLTW)				F	Digital Electronics 2
0901 Civil Engineering and Architecture 2 (PLTW)				S	Civil Engineering and Architecture 1
0904 Engineering Design and Development				F	Digital Electronics 2
0905 Engineering Design and Development				S	Digital Electronics 2

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F- Fall Semester, S - Spring Semester, E - Either Semester, Y- Year long.
- Lower case letters f, s, e, and y indicate that a course may be selected at that level and semesters beyond the points where first offered.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD - Academic Honors Diploma and THD - Technical Honors Diploma
- CTE - Career & Technical Education
- PLTW - Project Lead The Way

## ENGINEERING AND TECHNOLOGY EDUCATION

### **0811 Communication Systems**

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

### **0812 Introduction to Communications**

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

### **0821 Introduction to Design Processes**

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

### **0822 Technology Enterprise**

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

### **0831 Computers in Design and Production 1**

### **0832 Computers in Design and Production 2**

In this course students learn how computers are used in the design and production of products. This course will primarily focus on computer-aided drafting (CAD) of mechanical parts and architectural structures. Opportunity also exists for students to become familiar with robotics and computer-controlled machining tools. Two semesters, two credits, 9-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.*

### **0851 Technology Systems 1**

A course investigating the technologies involved in industrial engineering, business and information systems/human service professions, and selected art and humanities occupations. The course incorporates problem solving, investigation of

career opportunities, and computer graphics, simulations, and control systems. One Semester, one credit, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.*

### **0861 Introduction to Manufacturing**

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

## **HIRE Technology Courses**

### **0813-0814 – HIRE Technology I**

#### **Introduction to Advanced Manufacturing and Logistics**

Students are introduced to advanced manufacturing, logistics, and business principles that are utilized in today’s advanced manufacturing industry. The program curriculum is delivered through online immersive simulation activities. During the first semester, students will be introduced to advanced manufacturing operations, safety principles, quality control, environmental concerns, manufacturing process basics, industrial maintenance, advanced manufacturing technologies and career opportunities. The second semester will focus on APICS certifications, logistics and distribution, warehouse management, material handling and inventories, shipping and transportation, information systems, workplace communications, and effective teamwork principles. Students will have the opportunity to earn six dual credits and three industry certifications (APICS Logistics, APICS Operations, and MSSC Logistics Associate) during the first year of the program. Two semester course, one credit per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD. This course also counts as a Career Academic Sequence, Career-Technical Program, or Flex Credit course.*

### **8015 – 8018 HIRE II, Automation and Robotics**

*(Course taught at Muncie Area Career Center)* Introduces the basic theory, operation, and programming of automated manufacturing systems. Students will first learn manufacturing processes and basic mechanical, electrical, and fluid power principles and practices used in manufacturing environments. Understanding and using the underlying scientific principles related to electricity, electronics, digital technology, basic circuit analysis, sine waves, and Ohm’s Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Coordinate system concepts are introduced as relevant to machining processes, as well as fluid and mechanical power, welding, and lean manufacturing. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. In the mechanical power portion of the course, students will learn about machine specifications, basic



forces, friction, simple machines, motors, and motor controls. The second half of the course will focus on major types of manufacturing automation, such as Programmable Logic Controllers (PLC) and Robotics. Topics cover robotic principles including basic theory, robot safety, robotic classifications, applications, socioeconomic impact, work cell design, robot programming, and sensor and actuator interfacing. Students will be required to design, program and troubleshoot computer controlled machine logic and production processes in a project-oriented learning environment. This course will use classroom, lab, and online simulation and programming to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). Two, three or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A Core 40 directed elective or elective for AHD and THD.*

### **0883 Transportation Systems**

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

### **0884 Introduction to Transportation**

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

### **0891 Construction Systems**

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

### **0892 Introduction to Construction**

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

## **Project Lead The Way® Program Courses**

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

The sequence for PLTW Engineering courses is as follows:

- 1<sup>st</sup> Introduction to Engineering & Design 1 & 2
- 2<sup>nd</sup> Principles of Engineering 1 & 2
- 3<sup>rd</sup> Civil Engineering and Architecture 1 & 2
- 4<sup>th</sup> Engineering Design & Development 1 & 2

### **0894 Introduction to Engineering & Design 1**

### **0895 Introduction to Engineering & Design 2**

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

### **0896 Digital Electronics 1**

### **0897 Digital Electronics 2**

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

### **0898 Principles of Engineering 1**

### **0899 Principles of Engineering 2**

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

per semester) 10-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

**0900 Civil Engineering and Architecture 1**

**0901 Civil Engineering and Architecture 2**

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

**0904 Engineering Design & Development 1**

**0905 Engineering Design & Development 2**

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

**0896 Digital Electronics 1**

**0897 Digital Electronics 2**

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

## Career and Technical Education 1 of 2

COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
8015-8018 HIRE Automation and Robotics			Y		
8001-8004 Auto Services Technology			Y		Introduction to Transportation
8401-8404 Biomedical Science I Principles of Biomedical Science (PBS) Human Body Systems (HBS)			Y		PBS: Biology required HBS: PBS required
8405-8408 Biomedical Science II Medical Interventions (MI) Biomedical Innovation (BI)				Y	MI: HBS required BI: MI required
8031-8034 Construction Technology I & II			Y		Introduction to Construction
8111-8114 Construction Technology – Electrical I & II			Y		Introduction to Construction
8081-8084 Cosmetology I & II			Y		Business, Marketing, Entrepreneurship
8301-8304 Dental Career I & II			Y		Nutrition and Wellness; Interpersonal Relationships
8121-8124 Health Science I			Y		Human Development & Family Wellness
8125-8126 Health Science II			Y		Health Science I or Dental Assisting I
8051-8054 Early Childhood Education I & II			Y		Child Development; Interpersonal Relationships
8211-8214 IT – Computer Tech Support			Y		Computer Applications or Digital Communication Tools
8215-8218 IT - Network Fundamentals			Y		Computer Tech Support
8221-8224 IT – Interactive Media			Y		Computer Illustrations & Graphics or Web Design
8041-8043 – <b>Computer Illustration &amp; Graphics</b>					
8042-8044 IT – Web Design			Y		Computer Applications or Digital Communication Tools
8201 – Criminal Justice I			Y		Interpersonal Relationships

8202 - Fire and Rescue I			Y		Interpersonal Relationships
<b>Career and Technical Education 2 of 2</b>					
COURSE TITLE	RECOMMENDED GRADES				PRE-COURSE RECOMMENDATIONS
	9	10	11	12	
8191-8194 Welding Technology			Y		Intro to Manufacturing or Project Lead The Way courses
8131-8134 Cooperative Occupational Family and Consumer Sciences (COFACS I & II)				Y	
8151-8152 Industrial Cooperative Training (ICT)				Y	

**Explanations:**

- Capital letters F, S, E, and Y on departmental grid sheets indicate the semester options at which a course is first offered: F- Fall Semester, S – Spring Semester, E – Either Semester, Y- Year long.
- Lower case letters f, s, e, and y indicate that a course may be selected at that level and semesters beyond the points where first offered.
- Capital letter L indicates a laboratory course.
- Numbers 1, 2, 3, and 4 denote semester courses.
- Roman numerals I, II, III, and IV denote year courses or levels.
- AHD – Academic Honors Diploma and THD – Technical Honors Diploma
- CTE – Career and Technical Education

**CAREER & TECHNICAL EDUCATION**

The Muncie Area Career Center offers career and technical education training for high school juniors and seniors. Career & Technical Education (CTE) programs provide students the opportunity to develop technical skills for entering post-secondary education or technical training, employment, and the opportunity to prepare for nationally recognized industry certification.

**Indiana College and Career Pathways**

A College and Career Pathway is a sequence of high school courses aligned to college dual credit courses that includes certification testing so that upon graduation the student is ready to transition to college, an industry-recognized credential or technical certification, or enter a registered apprenticeship program. The following College and Career Pathways are available through the MACC:

**Pathway: Automotive Service Technology**

- *Courses: Automotive Technology I and II (Dual Credit)*

**Pathway: Architecture and Construction**

- *Courses: Construction I and II (Dual Credit)*
- *Courses: Construction Electrical I and II (Dual Credit)*

**Pathway: Education and Training**

- *Courses: Early Childhood Education I and II (Dual Credit)*

**Pathway: Health Sciences**

- Concentration: Biotechnology  
*Courses: Principles of Biomedical Science, Human Body Systems  
Medical Interventions and Medical Innovations (Dual Credit)*
- Concentration: Dental  
*Courses: Dental Assisting I and Health Sciences II*
- Concentration: Nursing  
*Courses: Health Science I and II (Dual Credit)*

**Pathway Cluster: Information Technology**

- Concentration: PC and Networking  
*Courses: Computer Tech Support & Network Fundamentals*
- Concentration: Web & Digital Communications  
*Courses: Computer Illustration/Graphics, Web Design, Interactive Media*

**Pathway: Law, Public Safety, Corrections, & Security**

- *Courses: Criminal Justice I and Fire and Rescue I (Dual Credit)  
(one year program/one semester courses)*

**Pathway: Manufacturing**

- *Courses: Welding Technology I and II (Dual Credit)*

**Pathway: Personal Care Services**

- *Courses: Cosmetology I & II (Dual Credit)*

The courses offered at the Muncie Area Career Center meet the requirements of the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors, or the General Diploma.

**Core 40 with Technical Honors Diploma (Effective Class of 2016)**

- 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, or
  2. Pathway dual credits from the approved dual credit list resulting in 6 transcribed 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 – F) 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 Informatin – 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

**Dual College Credit**

*Dual credit courses are defined as courses taken by high school students that satisfy requirements for earning credits toward both a high school diploma and a college degree. The Muncie Area Career Center along with Ivy Tech and Vincennes University*

has established dual-credit agreements for many of the courses offered at the MACC. In order to assist MACC students with preparing for college, all students are provided the opportunity to take the Accuplacer college placement examination on-site. The Accuplacer test results are one of pre-requisites for enrolling in dual credit courses. Students enrolled in the dual credit program must meet all college course requirements to earn dual credits.

### **WorkKeys Preparation & Testing**

Seniors at the Career Center are provided the opportunity to take the WorkKeys examination. The WorkKeys Assessment is part of the National Career Readiness Certification program. The WorkKeys certification is a credential that provides evidence of essential workplace skills and can be used to meet the requirements for a Technical Honors Diploma.

### **Internships and Job Shadowing Experience**

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

### **State & National Certification**

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

#### **2017-2018 Certifications:**

- Automotive Service Excellence (ASE)
- MSSC Certification: Safety, Quality Practices & Measurement, Manufacturing Processes and Production, and Maintenance Awareness
- HVAC Excellence
- Home Builders Institute (HBI) Carpentry
- National Center for Construction Education & Research (NCCER)
- American Welding Society (AWS)
- Pre-PAC Certification (Pre-Professional Assessment and Certification)
- Comp TIA IT Fundamentals
- Indiana Certified Nursing Assistant (CAN)
- State Board of Cosmetology
- First Responders Certification
- Project Lead The Way End-of-Program Certification Assessments
- WorkKeys Certification (ACT measure of workplace competencies)

### **8015 – 8018 HIRE II, Automation and Robotics**

*(Course taught at Muncie Area Career Center)* Introduces the basic theory, operation, and programming of automated manufacturing systems. Students will first learn manufacturing processes and basic mechanical, electrical, and fluid power principles and practices used in manufacturing environments.

Understanding and using the underlying scientific principles related to electricity, electronics, digital technology, basic circuit analysis, sine waves, and Ohm's Law are integral to this course. Manufacturing Trends covers basic concepts in manufacturing operations and plant floor layout in the production environment. Coordinate system concepts are introduced as relevant to machining processes, as well as fluid and mechanical power, welding, and lean manufacturing. Fluid power concepts will include hydraulic components and circuits, laws and principles, fluid power controllers, and the construction of systems. In the mechanical power portion of the course, students will learn about machine specifications, basic forces, friction, simple machines, motors, and motor controls. The second half of the course will focus on major types of manufacturing automation, such as Programmable Logic Controllers (PLC) and Robotics. Topics cover robotic principles including basic theory, robot safety, robotic classifications, applications, socioeconomic impact, work cell design, robot programming, and sensor and actuator interfacing. Students will be required to design, program and troubleshoot computer controlled machine logic and production processes in a project-oriented learning environment. This course will use classroom, lab, and online simulation and programming to prepare students for Certified Production Technician Testing through the Manufacturing Skills Standards Council (MSSC). Two, three or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A Core 40 directed elective or elective for AHD and THD.*

### **8001 - 8004 Automotive Services Technology I & II**

*Automotive Services Technology* includes classroom and laboratory experiences that incorporate training in service and repair work. Included in the course is training in the use of service/repair information and a variety of hand and power tools. This four-semester course addresses NATEF/ASE standards leading to certification in one or more of the following areas: steering and suspension; brakes; engine performance; manual transmissions and differential; automatic transmissions; electrical systems; air conditioning; and, engine repair. Seniors who meet the requirements may participate in a non-paid internship. Students are required to have their own set of hand tools and suitable clothing. Four-semester course, students may enroll for two, three or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for Core 40, AHD, and THD.*

### **PROJECT LEAD THE WAY® – BIOMEDICAL PROGRAM**

Project Lead The Way® (PLTW) is a not-for-profit organization that partners with high schools to provide Science, Technology, Engineering, and Mathematics (STEM) educational programs. This program combines the application of computer science and information technology to the fields of biology and medicine. The Biomedical program introduces students to careers in medicine, research, forensic science, pharmacology, genetics, epidemiology, and many other career fields. The program is presented through a series of four courses taken during a student's junior and senior years.

- 1<sup>st</sup> year Courses: Principles of Biomedical Sciences (3 credits)  
Human Body Systems (3 credits)  
2<sup>nd</sup> year Courses: Medical Interventions (3 credits)



## Medical Innovations (3 credits)

### **8401 – 8404 Biomedical Sciences (PLTW) – First Year**

#### **Principles of the Biomedical Sciences (PBS)- First Semester**

Pre-requisite: Biology with a grade of “C” or better. This a Project Lead The Way course that provides an introduction to the Biomedical Sciences field through “hands-on” projects and problem-based learning. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme throughout the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. One semester course, three credits per semester, 11-12<sup>th</sup> grades. *This course can be counted as two (2) science credits and one (1) elective credit for a Core 40, AHD, or THD diplomas.*

#### **Human Body Systems (HBS) – Second Semester**

Pre-requisite: Principles of Biomedical Sciences. Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. The systems are studied as “parts of a whole,” working together to keep the human machine functioning at an optimal level. Students design experiments, investigate the structures and functions of body systems, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation. Students work through interesting real-world cases and play the role of biomedical professionals to solve medical mysteries. One semester course, three credits per semester, 11-12<sup>th</sup> grades. *A Core 40 directive elective or elective for AHD and THD.*

### **8405 - 8408 Biomedical Sciences (PLTW) – Second Year**

#### **Medical Interventions (MI) – First Semester**

Pre-requisite: Human Body Systems. Students investigate a variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. The course is a “How-To” manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection; how to screen and evaluate the code in human DNA; how to prevent, diagnose and treat cancer; and how to prevail when the organs of the body fail. These scenarios expose students to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. These interventions are showcased across generations of a family and provide a look at the past, present and future of biomedical sciences. Lifestyle choices and preventive measures are emphasized throughout the course as are the important roles scientific thinking and engineering design play in the development of interventions of the future. One semester course, three credits per semester, 11-12<sup>th</sup> grades. *A Core 40 directive elective or elective for AHD and THD.*

### **Biomedical Innovation (BI) – Second Semester**

Pre-requisite: Medical Interventions. Biomedical Innovation is the capstone course of the PLTW Biomedical Sciences program designed to give student teams the opportunity to work with one or more mentors from the scientific and/or medical community. Teams will identify a research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers. One semester course, three credits per semester, 11-12<sup>th</sup> grades. A *Core 40 directive elective or elective for AHD and THD.*

### **8031 - 8034 Construction Technology I & II**

Students will participate in the construction of a house from the foundation to completion of the interior structure as part of a work/internship experience with the Muncie Homeownership Project. Instruction covers a variety of activities such as cost estimating; cutting, fitting, fastening, and finishing various materials; the uses of a variety of hand and power tools; and blueprint reading and following technical specifications. Knowledge concerning the physical properties of materials is also emphasized. Students will develop measuring skills and an advanced understanding of volume and area calculations skills required for construction of rafters and complex angles. Estimation skills will be strengthened through activities such as ordering of materials and planning construction jobs. Students are required to purchase basic hand tools and clothing appropriate to the construction trades. Four-semester course, students may enroll for two, three, or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **8111 - 8114 Construction Technology – Electrical I & II**

This course includes classroom and laboratory experiences in wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment. Students will learn basic theories of electricity, electronics, residential wiring and commercial wiring, motor characteristics, programmable controllers, digital circuits, signal processors, security systems monitoring, installing and operation, and electronic equipment troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Students will complete the residential wiring of a house with the Muncie Homeownership Project. Seniors who meet the requirements will participate in a non-paid internship experience. Students may enroll on a two, three, or four-semester basis, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **8081 - 8084 Cosmetology I and II**

The Cosmetology curriculum follows the state outlined course of classroom and practical experiences required to achieve the state mandatory 1500 clock hours of training required before an individual can qualify to take the State Board of Cosmetology Examination. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, bleaching, and fitting wigs; permanent waving; facials; manicuring; and, hand and arm massaging. Scientific knowledge related to bacteriology, anatomy, hygiene, and sanitation will be emphasized. Additional instruction in the areas of small business (salon)

management, record keeping, and customer relations is also provided in this course. This course requires students to have excellent attendance as students are required to attend class 20 hours per week *from 12:00 to 4:00 PM daily* as required by the State Board of Cosmetology. Some evening sessions will also be required in order to obtain the required number of skill performances for the Student Progress Book. Upon completion of this two-year program, students are eligible to take the State Board of Cosmetology examination, which will provide them with the required licensing to work as a Hair Stylist in Indiana. Students will be required to purchase a hair kit (\$420.00), black uniforms, and black work shoes. In addition, students must have their own transportation. Two-year program, four credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **8301 - 8304 Dental Careers I**

Students who meet the required criteria may enroll for a second year in the course titled Health Careers II to continue their study of careers in the field of dentistry. This course is designed to introduce students to the field of dentistry through classroom, lab instruction, and clinic experiences. Students will learn dental assisting skills, dental terminology, infection control, oral anatomy, first aid and CPR, dental charting procedures, four-handed dentistry procedures, professional ethics, and many other skills required to be successful as a Dental Assistant. Students who meet the requirements will participate in a clinical experience in a dentist's office. This program introduces students to standards and skills required to pass the Dental Association National Board (DANB) Certification test for Dental Assisting. Students are required to have uniforms (scrubs), white shoes, and other supplies. Students must also have a TB test before they are allowed to participate in the clinical internship. Students may enroll for two semesters, three credits per semester in 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **8121 - 8124 Health Science I**

The curriculum includes introduction to health careers, first aid, CPR, basic anatomy and physiology, vital signs, medical terminology, medical filing, and medical abbreviations. The major focus of the course is preparing students for the Indiana State Certified Nursing Assistant (CNA) certification, which requires completion of a written examination and practical skills test given at the end of the school year. The CNA state training course requires that the student complete, at a minimum, a 75-hour, non-paid, clinical internship in a long-term care facility. All students must have a physical examination, TB test, and drug screen before they can participate in the internship. Students are required to have special uniforms, shoes, and a name tag suitable for work in the health care facilities where they will receive their clinical experience. Students must provide their own transportation. Students who meet the required criteria may enroll for a second year in the course titled Health Sciences II. Students may enroll for two semesters, three credits per semester in 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **8125 - 8126 Health Science II**

First semesters, students will earn 3 credits in Health Science II. Second semester, students will earn 2 credits in Anatomy/Physiology and 1 credit in Medical Terminology (counted as part of a CTE sequence under the Health Science II pathway). Students must have earned credit in Health Sciences I or Dental Careers I to be admitted to this program. *Health Careers II* provides students interested in the dental or health care field the opportunity to further expand their knowledge, skills, and attitudes through the study of anatomy and physiology and a long-term clinical experience. This course will be a combination of classroom, laboratory, and clinical experience. An important part of any career in the health/dental field is an understanding of anatomy and physiology. Students will study homeostasis and the essentials of human function at the level of genes, cells, tissues, and organ systems. A second strand of the course is an extended laboratory experience designed to provide students the opportunity to assume the role of a health care provider and practice technical skills, previously learned in the classroom, at the clinical site. Students will renew their first aid/CPR certification. Students are required to have uniforms (scrubs), white shoes, and other supplies. Students must also have a TB test and physical examination before they are allowed to participate in the clinical internship. Students may enroll for two semesters, 12<sup>th</sup> grade. *A core 40 directed elective or elective for AHD and THD.*

### **8051 - 8054 Early Childhood Education I & II**

This program prepares students for employment in early childhood education and related services and provides the foundations for study in higher education that leads to early childhood education, and other child-related careers. The course of study includes planning and guiding developmentally appropriate activities for pre-school-age children, appropriate practices of guidance and discipline, application of basic health and safety principles when working with children, and overview of management and operation of licensed childcare facilities. Students gain actual experience working with young children by operating the MACC pre-school. Students learn about the requirements for the CDA (Child Development Associate) credential. Both first and second-year students who meet the requirements may participate in non-paid internship experience. Students must provide their own transportation to the internship site. Two, three, or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **INFORMATION TECHNOLOGY ACADEMY**

Information Technology is one of the fastest growing careers in the United States. Employers want IT workers with a broad set of IT skills, encompassing the areas of technical support, hardware, software applications, networking, project management skills, and system security. The Information Technology Academy, known as the IT Academy, provides students the opportunity to experience through hands-on learning these core IT skills. Students who complete both IT strands (PC & Network Support and Web & Digital Communications) during their junior and senior years will leave with a working knowledge of these IT skills and be able to select an area of specialization as they enroll in further training or college.

## Two Strands

1. PC and Network Support Pathway (2 semesters)
  - 1<sup>st</sup> Semester Computer Tech Support (3 credits)
  - 2<sup>nd</sup> Semester Network Fundamentals (3 credits)
2. Web & Digital Communications (2 semesters)
  - 1<sup>st</sup> Semester Interactive Media (3 credits)
  - 2<sup>nd</sup> Semester Computer Illustrations & Graphic Arts (2 credits and Web Design (1 credit)

## PC and NETWORK SUPPORT PATHWAY

### **8211 - 8214 Computer Tech Support** *(PC and Network Support Pathway)*

Students will be introduced to careers in technical support and network administration. Students will learn the functionality of computer hardware and software components as well as suggested best practices in maintenance, safety issues, and security. Through hands-on labs and Virtual Laptop and Virtual Desktop learning tools, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. Students will also learn core IT skills during this first-year program. One-semester course, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

### **8215 - 8218 IT Networking Fundamentals** *(PC and Network Support Pathway)*

Pre-requisite: Computer Tech Support course. Networking Fundamentals introduces students to concepts of 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 will be introduced and emphasized throughout this course. 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. One-semester course, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

## WEB and DIGITAL COMMUNICATIONS PATHWAY

### **8221 - 8224 Interactive Media** *(Web & Digital Communications Pathway)*

The Interactive Media pathway will prepare students for creating, designing, and producing interactive media products and services. This course emphasizes the advanced development of digitally-generated or computer-enhanced products using multimedia technologies. This course will allow students to have experiences in various software programs involved in creating multimedia presentations, digital movies, digital animation, game creation, and digital photography. Students explore the role of the Internet as it relates to communication and marketing. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Two-semester course, three credits per semester, 11-12<sup>th</sup> grades. A

*core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

**8041 - 8043 Computer Illustration & Graphics** *(Web & Digital Communications Pathway)*

A portion of this class includes Web Design and development. Students learn core IT skills related to computer hardware, software integration, and project management skills. The focus of the course is on learning design techniques, layout, and using various software programs for creating digitally-generated or computer-enhanced media. This includes the content listed in Web Design course description. One-semester course, two to three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

**8042 - 8044 Web Design** *(Web & Digital Communications Pathway)*

This class is incorporated into the Computer Illustrations & Graphics course to include website design and development concepts. This part of the course provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Through hands-on experiences students will learn to use various software programs for creating digitally-generated or computer-enhanced media. One-semester course, one to three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD and can be used to fulfill the MCS graduation requirement of one (1) technology credit.*

**PUBLIC SAFETY PROGRAM**

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

**8201 - 8202 Public Safety Program**

**Criminal Justice I** This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Instruction includes police patrol procedures, dealing with misdemeanors, felonies, traffic violations, and accidents; investigative and evidence collection procedures; making arrests; and testifying in court. Oral and written communication skills are reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. One semester, three credits, 11-12<sup>th</sup> grades, part of the year-long Public Safety program. *A core 40 directed elective or elective for AHD and THD.*

**Fire and Rescue I** The fire science component taught in the alternate semester includes instruction in the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment such as extinguishers, pumps, hoses, ropes, ladders, gas masks, hydrants, standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage

practices and equipment; fire and arson investigation; and inspection techniques. Students will also be introduced to the First Responder Medical Certificate that is needed for all of the public safety professions. One semester, three credits, 11-12<sup>th</sup> grades, part of the year-long Public Safety program. *A core 40 directed elective or elective for AHD and THD.*

### **8191 - 8194 Welding Technology**

*Welding Technology* includes classroom and laboratory experiences that develop a variety of skills detailed in American Welding Society (AWS) Entry Level Guidelines and Certifications. First-year students will learn techniques in fabrication, layout, forming, shearing, arc welding SMAW (stick), MIG, air carbon arc cutting, oxyacetylene welding and cutting, and flux cored arc welding. Second-year students will have the opportunity for introduction to plasma cutting, TIG, and resistance welding. Machine operations will include welding machines, drills, grinders, shears, brakes, metal saws, ironworker, and operations of a milling machine. Understanding the principles of metallurgy, gases, and materials science is integral to this course. Students who meet the requirements may participate in a non-paid internship. Two, three, or four semesters, three credits per semester, 11-12<sup>th</sup> grades. *A core 40 directed elective or elective for AHD and THD.*

### **Work Based Learning**

Work Based Learning programs are designed for students interested in pursuing a particular career area that provides them an opportunity to gain valuable on-the-job work experience before graduation while earning three credits each semester, an hourly wage, and a letter grade based on actual work performance and related class activities.

### **2021 - 2024 Work Based Learning – Family & Consumer Science**

Food service, dental, medical, child care, and retail experience is available for seniors interested in acquiring skills necessary to become successful in the world of work while getting practical paid work experience. Students combine related instruction and youth club activities with a series of on-the-job learning experiences in the study of their various occupations, including interpersonal relationships, development of work ethics, and the promotion of leadership skills. Students train an average of 15 hours per week on-the-job and spend one hour per day in related classroom instruction. Students must apply to the program and be interviewed by the teacher/coordinator. Students must provide their own transportation to their job sites. Two semesters, three credits per semester, 12<sup>th</sup> grade elective. *A core 40 directed elective or elective for AHD and THD.*

### **8151 – 8152 Work Based Learning – Trade and Industrial**

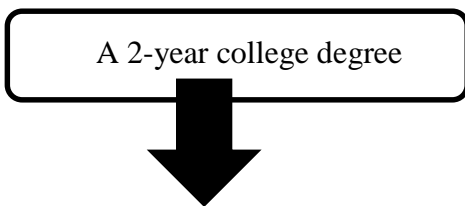
This course is designed to give practical work experience in trade and industrial occupations. Students train an average of fifteen (15) hours per week on-the-job during school time and attend regular meetings/instruction with a related trades instructor at the MACC. Work Based Learning is also designed for students who desire training in industrial technology occupations not offered at the Muncie Area Career Center, such as heating and air conditioning, horticulture, auto body repair, etc. Students must provide their own transportation. In addition, the student is responsible for any additional costs/fees associated with the training experience.



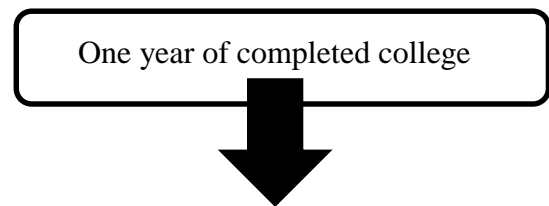
*In partnership with*  
**Ivy Tech Community College**



**\*Graduate with a high school diploma AND**



**OR**



<b>Associates in Liberal Arts Or Associates in Science</b>	<b>Statewide Transfer General Education Core Competencies</b>
<ul style="list-style-type: none"> <li>• At least 60 credit hours</li> <li>• Transfer to a four-year college</li> </ul>	<ul style="list-style-type: none"> <li>• 30 credit hours</li> <li>• Widely accepted at four-year colleges for transfer</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Receive broad exposure to a traditional Liberal Arts course of study, including art, English, literature, psychology, philosophy, music, sociology, history, social sciences, and laboratory sciences.</b></li> </ul>	
<p style="text-align: center;"><i>An Early College Student will...</i></p> <ul style="list-style-type: none"> <li>• Complete homework – reviewing the difficult areas, prepare for quizzes/tests and review written papers.</li> <li>• Seek assistance from the teacher and extra practice in those areas that they are having trouble understanding.</li> <li>• Keep detailed records of assignments and upcoming quizzes/tests/papers</li> <li>• Treat themselves, fellow students, instructors and staff with respect at all times Maintain an excellent attendance and discipline record for the remainder of high school.</li> </ul>	



## IVY TECH COMMUNITY COLLEGE'S ASSOCIATE OF ARTS IN LIBERAL ARTS

\* the primary difference between the Associates in Science (AS) and the Associates in Liberal Arts (AA) is that for the AS, an EC student does not need foreign language credits. Instead, they must make up these credits through extra science, math and humanities courses.

<b>Written Communication</b> ENGL 111 English Composition <u>ENGL 112</u> Exposition and Persuasion	6 credits
<b>Speaking and Listening</b> COMM 101 Fundamentals of Public Speaking	3 credits
<b>Quantitative Reasoning</b> MATH 136 College Algebra MATH 137 Trig with Analytic Geometry MATH 211: Calculus I	6-10 credits
<b>Scientific Ways of Knowing</b> BIOL 101 Introductory Biology CHEM 101 Introductory Chemistry I PHYS 101 AP Physics CHEM 105 AP Chemistry BIOL 105 AP Biology	6-10 credits
<b>Social and Behavioral Ways of Knowing</b> HIST 101 Survey of American History I HIST 102 Survey of American History II POLS 101 Intro to American Government and Politics PSYC 101 AP Psychology	12 credits
<b>Student Success Elective</b> IVYT 111 First Year Seminar	1 credit
<b>Transfer Cluster Elective</b> CINS 101 Introduction to Microcomputers FITN 100 Lifetime Fitness and Wellness	5 credits
<b>Foreign Language Elective</b> SPAN 101 Spanish Level I SPAN 102 Spanish Level II FREN 101 French Level I FREN 102 French Level II	8 credits
<b>Liberal Arts Capstone Course</b> GENS 279 Liberal Arts Capstone Course	1 credit
<b>Humanistic and Artistic Ways of Knowing</b> SPAN 201 Spanish Level III SPAN 202 Spanish Level IV FREN 201 French Level III FREN 202 French Level IV ENGL 206 AP Literature	6 credits
<b>TOTAL</b>	<b>At least 60 credits</b>

### Statewide Transfer General Education Core Competencies (STGEC)

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

<b>Written Communication</b> ENGL 111 English Composition	3 credits
<b>Speaking and Listening</b> COMM 101 Fundamentals of Public Speaking	3 credits
<b>Quantitative Reasoning</b> MATH 135 Finite Math MATH 136 College Algebra MATH 137 Trig with Analytic Geometry MATH 211 Calculus	3- 12 credits
<b>Scientific Ways of Knowing</b> BIOL 101 Introductory Biology CHEM 101 Introductory Chemistry I BIOL 105 AP Biology CHEM 105 AP Chemistry	3 to 12 credits
<b>Social and Behavioral Ways of Knowing</b> ECON 201 Principles of Macro Economics ECON 202 Principles of Micro Economics HIST 101 Survey of American History I HIST 102 Survey of American History II POLS 101 Introduction to American Government and Politics	3 to 12 credits
<b>Humanistic and Artistic Ways of Knowing</b> FREN 101/102 French Level III SPAN 101/102 Spanish Level III ENGL 206 AP Literature	3 to 12 credits
<b>TOTAL</b>	<b>30 Credits</b>

## **GRADUATION REQUIREMENTS**

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

To graduate with an Ivy Tech Community College degree or certificate, the student must:

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

Each student entering the final semester prior to graduation must complete an Application for Graduation. This will be completed at the high school with the help of the Early College Coordinator.

**Ivy Tech Community College Credit Awards for Advanced Placement  
Examinations--Revised August 2015**

<b>Advanced Placement Examination Title</b>	<b>Minimum Score</b>	<b>Ivy Tech Course</b>	<b>Credit Hours Awarded</b>
Art History	3	ARTH 101	3
	4,5	ARTH 101 and ARTH 102	6
Biology	3	BIOL 101	3
	4	BIOL 105	5
	5	BIOL 105 and 107	10
Calculus AB	3, 4, 5	MATH 211	4
Calculus BC	3	MATH 211	4
	4,5	MATH 211 and 212	8
Chemistry	3	CHEM 101	5
	4,5	CHEM 105 and 106	10
Chinese Language and Culture	3, 4, 5	Foreign Language Elective	8
Comparative Government and Politics	3, 4, 5	POLS 211	3
Computer Science A	3, 4, 5	CINS 136	3
English Language and Composition	3	ENGL 111	3
	4,5	ENGL 111, 112	6
English Literature and Composition	3, 4, 5	ENGL 206	3
Environmental Science	3, 4, 5	BIOL 120	3
European History	3, 4, 5	Humanities Elective	3
French Language	3, 4, 5	FREN 201, 202	8
French Literature	3	Humanities Elective	3
German Language	3, 4, 5	Foreign Language Elective	8
Human Geography	3, 4, 5	Humanities Elective	3
Italian Language and Culture	3, 4, 5	Foreign Language Elective	8
Japanese Language and Culture	3, 4, 5	Foreign Language Elective	8
Latin/Literature	3	Humanities Elective	3
Latin/Vergil	3, 4, 5	Foreign Language Elective	8
Macroeconomics	3, 4, 5	ECON 201	3
Microeconomics	3, 4, 5	ECON 202	3
Music Theory	3, 4, 5	HUMA 117	3
Physics B	3	PHYS 101	4
	4,5	PHYS 101 and 102	8
Physics C/Electricity and Magnetism	3	PHYS 102	4
	4,5	PHYS 221	4
Physics C/Mechanics	3	PHYS 101	3
	4,5	PHYS 220	4
Psychology	3, 4, 5	PSYC 101	3
Spanish Language	3, 4, 5	SPAN 201, 202	8
Spanish Literature	3	SPAN 201, 202, 240	11
Statistics	3, 4, 5	MATH 200	3
Studio Art Drawing	3, 4, 5	ARTS 100	3
Studio Art: 2-D Design	3, 4, 5	ARTS 102	3
Studio Art: 3-D	3, 4, 5	ARTS 103	3
U.S. Government and Politics	3, 4, 5	POLS 101	3
United States History	3, 4, 5	HIST 101 and 102	6
World History	3, 4, 5	HIST 111, 112	6

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

## APPENDIX

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## APPENDIX

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

### **Agriculture, Food, and Natural Resources**

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

### **Architecture & Construction**

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

### **Arts, A/V Technology, and Communication**

Careers in this cluster involve designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

### **Business Management and Administration**

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

### **Education & Training**

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

### **Finance**

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

### **Government & Public Administration**

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

**Health Science**

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

**Hospitality & Tourism**

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

**Human Services**

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

**Information Technology**

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

**Law, Public Safety, Corrections, & Security**

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

**Manufacturing**

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

**Marketing Sales & Services**

Careers in this cluster require planning, managing, and performing marketing activities to reach organizational objectives.

**Science, Technology, Engineering, & Mathematics**

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

**Transportation, Distribution, & Logistics**

Careers within this cluster include the planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure

planning and management, logistics services, mobile equipment, and facility maintenance.

### **MILITARY EXPERIENCE – High School Credits**

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

- *Basic Training* - A maximum of four (4) credits may be recognized in the following areas:
  - Physical Education 2 credits*
  - Health & Safety 2 credits*For basic training, a maximum of one (1) credit may be granted for each of three months of service.
- *Overseas Instruction* - Credit may be awarded for courses completed through accredited colleges and universities as recommended by the respective colleges and universities, such as the University of Maryland overseas instruction.
- *Service Training School* - Credit may be granted in accordance with recommendations made by the American Council of Education in the publication "Guide to the Evaluation of Educational Experience in the Armed Forces." When the descriptions of service schools are not listed in this guide, appropriate credit recommendations may be obtained by writing to the American Council on Education.
- *Armed Services Institutes* - Credit may be awarded for courses completed in the United States Armed Forces Institute, Marine Corps Institute, and the Coast Guard Institute, provided that the courses shall be validated by terminal examinations as recommended by the American Council on Education. Credit may be awarded in recognition of satisfactory achievement on examinations in established high school courses.

### **GUIDANCE FORMS**

Students should speak to their counselor if they wish to obtain one of the following forms:

- Application to Audit a Course
- Application for Cadet Teaching
- Foreign Exchange Program form
- Request for Enrollment on a Pass/Fail Basis
- Application for Post-Secondary Program
- Application to Retake a Course
- Request for Early High School Graduation