Indianapolis Public Schools
2023–2024 Course Catalog
Indianapolis Public Schools

MISSION

IPS empowers and educates all students to think critically, creatively, and responsibly, to embrace diversity, and to pursue their dreams with purpose.

VISION

IPS is a family of excellent public schools in which every student has the opportunity to succeed and the power to create their own future.
Welcome to the 2023–2024 Course Selection Process for Indianapolis Public Schools.

The Indianapolis Public Schools Course Catalog provides information students, families, and school staff will need to select or advise students' academic course selections and is designed to help them make the best choices for their high school educational career. Students will discover the many exciting high school course options available to them.

It is especially important that students discuss their course selections with their school counselor and parent/guardian. The choices students make in high school impact their future postsecondary options. In order to earn a high school diploma, students must meet all course, credit and test requirements. Each high school is comprised of several academies which house multiple pathways. Each pathway is designed by the state of Indiana in order to prepare students for a multitude of post-high school opportunities — from entry-level careers to highly technical studies at community colleges, colleges and universities. Students are encouraged to select the most challenging course of study in which they can be successful.

Remember, when students complete their course selection sheet, they are requesting a specific course, NOT a specific teacher, time or place. Every effort will be made to grant student course requests. Students may choose the courses they would like to take in the next school year; however, schedules may change pending final grades in the courses students are currently enrolled in, staffing changes, building-level schedule changes, summer school completion, required prerequisite course completion, etc.

STEPS FOR COMPLETING THE COURSE SELECTION PROCESS

High school classes will be selected based on a student’s career and educational aspirations. Careful and strategic four-year planning should give students a challenging class schedule that meets all requirements and allows opportunities to explore their interests.

1. Review the General Information section of this registration guide. Identify the requirements for graduation by reviewing the charts included.
2. Read the course descriptions for required classes and electives in which you are interested, and make certain you meet the prerequisite requirements.
3. Use the High School Plan developed by you and your counselor to select the courses you want to take.
4. Talk with your school counselors for help in determining the courses you need.
5. Meet with your counselor to make your course selections on your Course Selection Sheet.
6. Have your parent/guardian double check your selections.
7. Return the course selection sheet to your school counselor after you and your parent/guardian have signed it. Be sure to return this document by the designated deadline.

IMPORTANT: Course selection is the process required for students to select classes that meet their academic path. Make sure to review your academic transcript when making final selections of classes for this school year.
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**APPLIED COURSES BY SUBJECT AREA**
INDIANAPOLIS PUBLIC SCHOOLS DISTRICT CONTACTS

- **CHIEF ACADEMIC OFFICER**
  - Dr. Warren Morgan

- **EXECUTIVE DIRECTOR OF POST-SECONDARY READINESS**
  - Melody Coryell — coryelmd@myips.org

- **CTE PATHWAY DIRECTOR**
  - Jennifer Berry — berryjennifer@myips.org
  - *Areas of Assistance*: Career and Technical Education (CTE) pathway courses, industry certifications, and work-based learning

- **DIRECTOR OF ACADEMIES AND PATHWAYS**
  - Austin Dodd — dodda@myips.org
  - *Areas of Assistance*: Dual Credit (DC), International Baccalaureate (IB), and Early College (EC) course offerings

- **DIRECTOR OF POST-SECONDARY PLANNING**
  - Rodney Smith —smithrodneyw@myips.org
  - *Areas of Assistance*: Advanced Placement (AP) course offerings

- **SCHOOL COUNSELING COORDINATOR**
  - Ryan Preci – precir@myips.org
  - *Areas of Assistance*: Graduation requirements, course scheduling, and course catalog updates

- **K-8 SCHOOL CHOICE COORDINATOR**
  - Matthew Thompson — thompsonm@myips.org
  - *Areas of Assistance*: School choice support, middle school course planning, and early high school courses
GRADUATION REQUIREMENTS

INDIANA GRADUATION PATHWAYS

- Core 40
  - Minimum 40 credits
- Academic Honors
  - Minimum 47 credits
- Technical Honors
  - Minimum 47 credits
- General
  - Minimum 40 credits
  - Core 40 opt-out conference required

- Project-Based Learning: Allows students to gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question.
- Service-Based Learning: Integrates academic study with service experience, reflects larger social, economic, and societal issues, and collaborative efforts between students, schools, and community partners.
- Work-Based Learning: Activities that occur in a workplace while developing the student’s skills, knowledge, and readiness for work.
- Work Products for a student’s experience can include:
  - Videos
  - Papers
  - Resume
  - Dual Credit
  - Certifications
  - Portfolio
  - Projects
  - Slideshows
  - Presentation
  - Five Year Plan
  - Reflection of Experience
  - Letter of Recommendation
  - Letter of Employment
  - Verification
  - Post-secondary Related Experiences
  - Skills List

- Honors Diploma: Academic or Technical
- SAT: Reading/Writing = 480 & Math = 530
- ACT: English = 18, Reading = 22, Math = 22, Science = 23 (Two out of four Needed with at least 1 in English/Reading & 1 in Math/Science)
- ASVAB: Minimum score of 31
- Industry Recognized Certification: Must be on DWD's Graduation Pathways Approved List
- Apprenticeship: Must Be Federally Recognized
- CTE Concentrator:
  - Class of 2023-2024: C average or higher in at least 2 advanced HS courses in a state-approved CTE Pathway
  - Class of 2025 and Beyond: C average or higher in Required/NLPS Concentrator Courses in a state-approved CTE Pathway (Principles, Concentrator A, & Concentrator B)
- AP/IB/Dual Credit/Cambridge International/CLEP: C average or higher in 3 courses (If the 3 courses must be in a core content area or all 3 must be part of a CTE pathway)
- Locally Created Pathway: Approved by SB9E

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# General Diploma Requirements*

## Indiana General High School Diploma

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

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

- The student, the student’s parent/guardian, and the student’s counselor (or another staff member who assists students in course selection) must meet to discuss the student’s progress.
- The student’s Graduation Plan (including four year course plan) is reviewed.
- The student’s parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
- If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirements for a general diploma and the career/academic sequence the student will pursue is determined.

## Course and Credit Requirements (Class of 2016 & Beyond)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Language Arts</td>
<td>8 credits</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 credits (in grades 9-12)</td>
</tr>
<tr>
<td></td>
<td>2 credits: Algebra I or Integrated Mathematics I</td>
</tr>
<tr>
<td></td>
<td>2 credits: Any math course</td>
</tr>
<tr>
<td></td>
<td>General diploma students are required to earn 2 credits in a Math course or a Quantitative Reasoning (QR) course during their junior or senior year. QR courses do not count as math credits.</td>
</tr>
<tr>
<td>Science</td>
<td>4 credits</td>
</tr>
<tr>
<td></td>
<td>2 credits: Biology I</td>
</tr>
<tr>
<td></td>
<td>2 credits: Any science course</td>
</tr>
<tr>
<td></td>
<td>At least one credit must be from a Physical Science or Earth and Space Science course</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4 credits</td>
</tr>
<tr>
<td></td>
<td>2 credits: U.S. History</td>
</tr>
<tr>
<td></td>
<td>1 credit: U.S. Government</td>
</tr>
<tr>
<td></td>
<td>1 credit: Any social studies course</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2 credits</td>
</tr>
<tr>
<td>Health and Wellness</td>
<td>1 credit</td>
</tr>
<tr>
<td>College and Career Pathway Courses</td>
<td>6 credits</td>
</tr>
<tr>
<td>Flex Credit</td>
<td>5 credits</td>
</tr>
<tr>
<td></td>
<td>Flex Credits must come from one of the following:</td>
</tr>
<tr>
<td></td>
<td>Additional elective courses in a College and Career Pathway</td>
</tr>
<tr>
<td></td>
<td>Courses involving workplace learning such as Cooperative Education or Internship courses</td>
</tr>
<tr>
<td></td>
<td>High school/college dual credit courses</td>
</tr>
<tr>
<td></td>
<td>Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages or Fine Arts</td>
</tr>
<tr>
<td>Electives</td>
<td>6 credits</td>
</tr>
<tr>
<td></td>
<td>Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years.</td>
</tr>
</tbody>
</table>

40 Total Credits Required

*Formal Core 40 Opt-Out Process Required*
# Core 40 and Honors Diploma Requirements

## Core 40 with Academic Honors (minimum 47 credits)

For the Core 40 with Academic Honors designation, students must:
- Complete all requirements for Core 40.
- Earn 2 additional Core 40 math credits.
- Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages).
- Earn 2 Core 40 fine arts credits.
- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.

Complete one of the following:

A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams
B. Earn 6 verifiable transcripted college credits in dual credit courses from the approved dual credit list.
C. Earn two of the following:
   1. A minimum of 3 verifiable transcripted college credits from the approved dual credit list.
   2. 2 credits in AP courses and corresponding AP exams.
   3. 2 credits in IB standard level courses and corresponding IB exams.
D. Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading and writing section.
E. Earn an ACT composite score of 26 or higher and complete written section
F. Earn 4 credits in IB courses and take corresponding IB exams.

## Core 40 with Technical Honors (minimum 47 credits)

For the Core 40 with Technical Honors designation, students must:
- 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. Pathway designated industry-based certification or credential, or
  2. Pathway dual credits from the approved dual credit list resulting in 6 transcripted college credits.
- Earn a grade of "C" or better in courses that will count toward the diploma.
- Have a grade point average of a "B" or better.
- Complete one of the following:
  A. Any one of the options (A - F) of the Core 40 with Academic Honors
  B. Earn the following minimum scores on WorkKeys: Workplace Documents, Level 6; Applied Math, Level 6; and Graphic Literacy, Level 5.
  C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 80, Math 75.
  D. Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80.
CERTIFICATE OF COMPLETION REQUIREMENTS*

Indiana Certificate of Completion
Course of Study
Effective with the students who enter high school in 2018-19 school year (Class of 2022)

The Course of Study for the Certificate of Completion is a framework for aligning curriculum to grade level standards while meeting the individual goals and transition needs stated in the student’s Individual Education Plan (IEP).

Minimum total 40 credits/applied units: It is expected that these requirements are met through enrollment in a combination of general education courses for credit, modified general education courses in which non-credit applied units are earned and special education courses in which non-credit applied units are earned.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits/Applied Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Language Arts</td>
<td>8 credits/applied units</td>
</tr>
<tr>
<td></td>
<td>Including a balance of literature, composition, vocabulary, speech/communication</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 credits/applied units</td>
</tr>
<tr>
<td></td>
<td>Including a balance of number sense, expressions, computation, data analysis, statistics, probability, equations and inequalities and personal finance. Student must take a math or applied math course each year in high school.</td>
</tr>
<tr>
<td>Science</td>
<td>4 credits/applied units</td>
</tr>
<tr>
<td></td>
<td>Including a balance of physical, earth/nature, life, engineering and technology</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4 credits/applied units</td>
</tr>
<tr>
<td></td>
<td>Including a balance of history, civics and government, geography, economics</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2 credits/applied units</td>
</tr>
<tr>
<td>Health &amp; Wellness</td>
<td>1 credit/applied unit</td>
</tr>
<tr>
<td>Employability</td>
<td>10 credits/applied units</td>
</tr>
<tr>
<td></td>
<td>Job exploration, work- or project-based learning experiences, employability skills (mindsets, self-management, learning strategies, social, workplace), portfolio creation, introduction to post-secondary options</td>
</tr>
<tr>
<td>Electives</td>
<td>7 credits/applied units</td>
</tr>
</tbody>
</table>

Certificate of Completion Transition Portfolio

Students earning a certificate of completion fulfill at least one of the following (aligned with transition goals):
1. Career Credential: Complete an industry-recognized certification, one-year certificate or state-approved alternative
2. Career Experience: Complete project- or work-based learning experience or part time employment
3. Work Ethic Certificate: Earn a Work Ethic Certificate (criteria to be locally determined)
4. Other Work Related Activities: As determined by the case conference committee

Assumptions:
1) High Expectations for all students is a shared responsibility.
2) General Education courses are accessed whenever appropriate to fulfill the Certificate of Completion course of study.
3) Students’ IEP goals are aligned with grade level standards/content connectors that drive curriculum and instruction.
4) Communication skills, reading skills, and problem solving skills are integrated into all courses.
5) Courses can be repeated with new goals if appropriate; more than four years may be needed for completion.
6) All courses are driven by the Transition IEP and individual goals of each student.

*The Case Conference Committee (CCC) should make the decision as to whether a student with a disability will earn a diploma or a certificate of completion (COC), and if a diploma, the type of diploma the student will earn.
EARLY GRADUATION REQUIREMENTS
The state of Indiana makes a provision for a student to earn a high school diploma in seven semesters instead of eight, assuming the following steps have been taken:

- The student has met all graduation requirements,
- The student has been accepted and enrolled into a post-secondary educational institution, or
- The student has an enlistment contract with an educational component into a branch of the U.S. Armed Forces.

Such requests shall be initiated by the student at the beginning of their seventh semester, approved in writing by the parent/guardian, and presented to the school counselor and the principal. Students meeting the seven semester graduation requirement may participate in commencement exercises. It is the decision of the principal to approve or deny this request.

GRADING SCALE — WEIGHTED GRADES
The establishment of the weighted grading policy for Grades 9–12 assures that students are encouraged and rewarded for taking higher-level courses. The following grade scale will be used.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Value to Grade</th>
<th>AP/IB/DC Courses</th>
<th>Honors Courses</th>
<th>Regular Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93-100</td>
<td>5.0</td>
<td>4.5</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td>4.67</td>
<td>4.17</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>87-89</td>
<td>4.33</td>
<td>3.83</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>83-86</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80-82</td>
<td>3.67</td>
<td>3.17</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>77-79</td>
<td>3.33</td>
<td>2.83</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>73-76</td>
<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>70-72</td>
<td>2.67</td>
<td>2.17</td>
<td>1.67</td>
</tr>
<tr>
<td>D+</td>
<td>67-69</td>
<td>2.33</td>
<td>1.83</td>
<td>1.33</td>
</tr>
<tr>
<td>D</td>
<td>63-66</td>
<td>2.0</td>
<td>1.5</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>60-62</td>
<td>1.67</td>
<td>1.17</td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>50-59</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

LATIN HONORS SYSTEM
During the 2018–19 school year, IPS transitioned from valedictorian/salutatorian to academic honors to recognize our graduating seniors. Honors will be awarded based on a students’ 7th semester, weighted grade point average (GPA). The following scale will be used to award honors.

- 4.00 and above: Summa Cum Laude (Highest Honors)
- 3.75-3.99: Magna Cum Laude (High Honors)
- 3.50-3.74: Cum Laude (Honors)

POLICY FOR CHANGING A STUDENT’S PLACEMENT WITHIN A SEMESTER
A student is permitted to withdraw or change to an Honors class or to a regular course of the same topic if the following requirements are met:

- The student, parent/guardian, and teacher must be in agreement that the removal/change is in the best interest of the student.
- The request must meet administrative approval.
- The school counselor is capable of finding the desired course that is in alignment with the student’s schedule.
- The student will transfer into the new course with the current grade achieved in the previous class.

RETAKING A CLASS/ACADEMIC RENEWAL POLICY
Failed Courses: If a student fails a course that is required for graduation, it should be repeated within the two semesters following
the failed semester. Failed courses may be retaken in several different ways. Interested students should speak with their counselors to determine which option fits their needs. In order to ensure accurate course selection, all options require counselor approval prior to enrollment.

**High School Credits Taken Prior to 9th Grade**: Middle school students who earn a C- or below in courses identified in School Board Policy 5461 are expected to repeat the course in high school. The course will not be entered on the high school transcript, but will be counted as a middle school report card grade.

**Repeating a Course Already Passed With a C- or Below**: A student may repeat a course in which he or she previously earned a grade of C- or below in order to improve GPA and qualify for an Honors Diploma.

The following conditions apply to retaking a course already passed with a C- or below:

1. The highest grade will appear on the transcript and all other attempts will be replaced with an “R” (replaced) and have the point credit values removed from the official transcript. The highest grade earned in the course will count toward the cumulative GPA and class rank.
2. If the student receives the same grade, the first grade becomes an “R” and is not factored into the GPA or rank.

**ONLINE LEARNING INFORMATION**

Students who attend any IPS School that offers online learning can take advantage of several online learning opportunities. Students must be enrolled in an IPS school to take advantage of this option.

The Department of Online Learning allows students to work at their own pace during the semester. This enables students to work ahead for credits, earn credits for classes they do not have room in their schedule for, or accelerate their learning.

Student participation is monitored by the Online Learning coordinator and Online Learning teachers in addition to the on-campus faculty of lab specialists and counselors. Support is provided both via the online system and in computer labs on the four high school campuses to ensure student success in online learning.

Online courses are most successful for responsible students who take pride in advancing their education and progressing their work on schedule. Students who wish to take online courses must first schedule a meeting with their counselor to review their academic profile. Together, the counselor, student and parent will make the online enrollment decision.

**HIGH SCHOOL CREDITS EARNED IN MIDDLE SCHOOL**

Middle school students who have taken high school courses in their middle schools and received a C or better will earn high school credits for these successfully completed courses. These grades and credits from middle schools will be posted and begin the student’s IPS official high school transcript. These grades will be used to calculate high school GPA and class rank.

Any grade lower than a “C” for high school courses taken prior to Grade 9 will appear on the student’s report card, but will not be transcribed on the student’s official high school transcript.

**ADVANCED PLACEMENT PROGRAM**

The Advanced Placement Program (AP) gives students an opportunity to take college-level courses and exams while they are still in high school. Students will automatically receive high school credit for successfully completing the course, but they must receive a score of 3 or above on the AP exam to earn the college credit.

**DUAL-CREDIT OPPORTUNITIES**

A Dual-Credit course allows students to earn both college credit hours and high school credit for successfully completing just one course. Indianapolis Public Schools has partnerships with several state colleges and universities that offer Dual-Credit courses. The college credit hours awarded through Dual Credit are earned through completion of the course. Some colleges require certain grade point averages, placement test scores, grade levels, and/or fees which, if any, are significantly reduced from the university’s on-campus costs.

All students who receive Free or Reduced Lunch are waived from paying any state university Dual Credit fees. In addition, students who might need some financial assistance may apply for scholarships through the university or college. Indianapolis Public Schools has Dual Credit agreements with the following universities: IUPUI, Ivy Tech Community College, and Vincennes University. All Dual Credits from courses on the Core Transfer Library list are accepted at any Indiana state college or university and many private colleges. A complete list of Dual Credit courses in the Core Transfer Library can be found on the Indiana Department of Education’s website. Dual Credits include both academic courses and career academic courses.
NCAA ELIGIBILITY REQUIREMENTS

COLLEGE-BOUND STUDENT ATHLETES
To play sports as a freshman in NCAA Divisions I and II, students must meet specific standards. Students must graduate from high school and make at least the minimum required grade-point average in 16 core academic classes for Division I and Division II.

NCAA Division I Core Academic Course Requirements
- 4 years English
- 3 years mathematics (Algebra I or higher)
- 2 years social science
- 2 years natural or physical science (including one lab course, if offered by the high school)
- 1 year of an additional course in English, mathematics, or natural or physical science
- 4 additional years of academic courses in any of the above areas, or in world language, philosophy, or non-comparative religion

NCAA Division II Core Academic Course Requirements
- 3 years English
- 2 years mathematics (Algebra I or higher)
- 2 years natural or physical science (including one lab if offered by high school)
- 2 years social science
- 3 years of additional English, mathematics, or natural/physical science
- 4 years of additional courses (from any area above, world language, or comparative religion/philosophy.

GPA Requirements
The GPA requirement for Division I is a 2.3 minimum for the 16 core courses (not the overall GPA). The GPA requirement for Division II is a 2.2 minimum for the 16 core courses (not the overall GPA). Students should work with their high school counselor and coach to make certain their class schedule is on track to meet the NCAA guidelines.

NCAA ELIGIBILITY CENTER CERTIFICATION
If the student intends to participate in Division I or II athletics as a freshman, then he/she must register and be certified by the NCAA Eligibility Center.

FEE WAIVERS
Students may be eligible for a fee waiver if they meet the income eligibility requirement. Please see your school counselor for details.

TEST SCORE REQUIREMENTS
Division I and II students must must achieve the minimum required SAT score or ACT score before his/her first full-time college enrollment in order to qualify. Minimum required test scores are based on the student’s core courses GPA.

ADDITIONAL INFORMATION
Athletic information included is provided as a resource. Specific questions or clarifications of athletic information and/or eligibility should be addressed to the school’s athletic director. For more information regarding the rules, please go to www.NCAA.org. Click on “Academics and Athletes” then “Eligibility and Recruiting.” Or visit the NCAA Eligibility Center website at www.eligibilitycenter.org.
KEY TERMS AND DEFINITIONS

ACADEMIES
A group of educational, future-ready pathways are built around a specific academic or career theme to create an academy.

ADVANCED PLACEMENT (AP)
AP gives students the chance to tackle college-level work while they’re still in high school. Through taking AP exams, students have the potential to earn college credit and placement.

APPRENTICESHIP
Apprenticeship programs for youth between the ages of 16—24 combine academic and technical classroom instruction with work experience through an apprenticeship program. It provides the foundation for youth to choose among multiple pathways — to enroll in college, begin full-time employment, or a combination. These programs are also designed to prepare students to enter and succeed in a Registered Apprenticeship Program (RAP).

CAPSTONE
Students usually take capstone courses during the final year in school. The capstone experience provides the opportunity for every student to practice skills that will serve them well in college and at work: critical thinking, creative problem solving, communication skills, and collaboration.

CAREER AND TECHNICAL EDUCATION (CTE)
Pathways that focus on students learning the academic, technical and employability skills within a specific career discipline. Opportunities to earn dual-credit, industry recognized certifications and work-based learning experiences are embedded within the curriculum.

DUAL CREDIT (DC)
Dual-credit classes are courses taken by high school students that can satisfy requirements for earning both a high school diploma and college credits. Dual-credit courses can be taken at a high school or at a college campus and are taught by credentialed high school faculty or college faculty.

EARLY COLLEGE
Early college pathways provide students opportunities to earn college credit while in high school, removing the academic, financial and psychological barriers that prevent too many students from advancing to and succeeding in college. Students receive enhanced support to help them excel both academically and personally. Additionally, Students and families also benefit from reduced or free tuition costs.

INTERNATIONAL BACCALAUREATE (IB)
The International Baccalaureate (IB) is a global leader in international education — developing inquiring, knowledgeable, confident and caring young people. The programmes empower school-aged students to take ownership in their own learning and help them develop future-ready skills to make a difference and thrive in a world that changes fast.

NEXT LEVEL PROGRAMS OF STUDY (NLPS)
Next Level Programs of Study are new career and technical education courses for the 2022-2023 school year. This initiative, called Next Level Programs of Study (NLPS), will improve the consistency, quality and intentionality of Career and Technical Education (CTE) instruction across Indiana.

PATHWAYS
Specific courses and intentional course sequence, academic programs, and associated learning experiences that individual students complete as they progress in their education toward a career. Pathways extend into post-secondary opportunities where learning can continue, grow and expand. Prepares students to meet Indiana Graduation Pathways requirements.

SERVICE BASED LEARNING (SBL)
Service-based learning is a teaching and learning methodology which fosters civic responsibility and applies classroom learning through meaningful service to the community. The strongest service-learning experiences occur when the service is meaningfully immersed in ongoing learning and is a natural part of the curriculum that extends into the community.

STATE EARN AND LEARN (SEAL)
Indiana’s State Earn and Learn (SEAL) programs are certified through the Office of Work-Based Learning and Apprenticeship. They are structured but flexible programs that include an education component and on-the-job training component. SEALs focus on employer needs, with sustainable partnerships and embedded industry certifications.

WORK-BASED LEARNING (WBL)
Work-Based Learning is a framework of various pathways, or solutions, which include practical experiences to help students gain an understanding of an occupation with on-the-job learning. It ranges from career awareness to career training.
COURSES OFFERED:

- Advanced English/Language Arts, College Credit (L1124)
- Advanced Mathematics, College Credit (M2544)
- Advanced Science, College Credit (X3090)
- Advanced Social Sciences, College Credit (S1574)
- Advanced World Language, College Credit (W2152)

L1124 ADVANCED ENGLISH/LANGUAGE ARTS, COLLEGE CREDIT

Advanced English/Language Arts, College Credit, is an advanced course based on the Indiana Academic Standards for English/Language Arts in grades 11 and 12. This course title covers any English language and composition advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9 and English 10 or other literature, language, composition, and speech courses or teacher recommendation
- Credits: 1 semester course, 1 credit per semester. May be offered for successive semesters
- Fulfills an English/Language Arts requirement for all diplomas
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and/or taught by higher education faculty.
- Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.

M2544 ADVANCED MATHEMATICS, COLLEGE CREDIT

Advanced Mathematics, College Credit is a title covering (1) any advanced mathematics course (beyond Algebra II) that is offered for credit by an accredited post-secondary institution and is not a course offered in the Indiana State Approved Course Titles and Descriptions.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Integrated Mathematics III
- Credits: 1 semester course, 1 credit per semester. May be offered for successive semesters
- Counts as a Mathematics course for all diplomas
- Actual course title and university name may be appended to the end of the course title on the student transcript.
- Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty.
- Qualifies as a quantitative reasoning course

X3090 ADVANCED SCIENCE, COLLEGE CREDIT (L)

Advanced Science, College Credit is a title that covers (1) any science course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school, or (2) any other post-secondary science course offered for dual credit under the provisions of 511 IAC 6-10

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. May be offered for successive semesters
- Counts as a Science Course for all diplomas
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty.
- Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.

S1574 ADVANCED SOCIAL SCIENCES, COLLEGE CREDIT

Advanced Social Sciences, College Credit is a title covering (1) any advanced social sciences courses offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school or (2) any other post-secondary social sciences course offered for dual credit under the provisions of 511 IAC 6-10.

- Recommended Grade: 12
W2152 ADVANCED WORLD LANGUAGE, COLLEGE CREDIT
Advanced World Language, College Credit is a course covering (1) any advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school, or (2) any other post-secondary world language course offered for dual credit under the provisions of 511 IAC 6-10.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Levels I, II, and III of the language
- Credits: 1 semester course, 1 credit per semester. May be offered for successive semesters
- Counts as a Directed Elective or Elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma
- Courses that use this title are most often those taught through the post-secondary campus, taught either online or in traditional settings or a combination; and taught by higher education faculty.
- Courses that use this title are those that do not meet specific high school standards for a corresponding high school course, as they are standards beyond what is taught in the high school.
COURSES OFFERED:

- AP Art History (F4025)
- AP Biology (L) (X3020)
- AP Calculus AB (M2562)
- AP Chemistry (L) (X3060)
- AP Comparative Government and Politics (S1552)
- AP Computer Science A (B4570)
- AP Computer Science Principles (C4568)
- AP English Language and Composition (L1056)
- AP English Literature and Composition (L1056)
- AP Environmental Science (L) (X3012)
- AP French Language and Culture (W2032)
- AP Human Geography (S1572)
- AP Macroeconomics (S1564)
- AP Microeconomics (S1566)
- AP Music Theory (L) (F4210)
- AP Physics 1: Algebra-Based (L) (X3080)
- AP Physics 2: Algebra-Based (L) (X3081)
- AP Psychology (S1558)
- AP Spanish Language and Culture (W2132)
- AP Statistics (M2570)
- AP Drawing (F4048)
- AP 2-D Art and Design (F4050)
- AP 3-D Art and Design (F4052)
- AP United States Government and Politics (S1560)
- AP United States History (S1562)
- AP World History Modern (S1612)

F4025 AP ART HISTORY

AP Art 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. The AP Art History course is equivalent to a two semester introductory college course that explores topics such as the nature of art, art making, and responses to art. By investigating a specific image set of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the course fosters in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content, as they experience, research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfils a Fine Arts requirement for the Core 40 Academic Honors Diploma

X3020 AP BIOLOGY (L)

AP Biology 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. The major themes of the course include: The process of evolution drives the diversity and unity of life, Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis, Living systems store, retrieve, transmit and respond to information essential to life processes, Biological systems interact, and these systems and their interactions possess complex properties.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Biology I and Chemistry I
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course
- Laboratory course

M2562 AP CALCULUS AB

AP Calculus AB 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 Calculus AB is equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

- Recommended Grade: 11, 12
- Required Prerequisites: Pre-Calculus: Algebra
X3060 AP CHEMISTRY (L)
AP Chemistry 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. The content includes: (1) structure of matter: atomic theory and structure, chemical bonding, molecular models, nuclear chemistry; (2) states of matter: gases, liquids and solids, solutions; and (3) reactions: reaction types, stoichiometry, equilibrium, kinetics and thermodynamics.

- Recommended Grade: 12
- Required Prerequisites: none
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Counts as a mathematics course for all diplomas
- Qualifies as a quantitative reasoning course

S1552 AP COMPARATIVE GOVERNMENT AND POLITICS
AP Comparative Government and Politics 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 Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and the political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. Topics include: Introduction to Comparative Politics; Sovereignty, Authority, and Power; Political institutions; Citizens, Society, and the State; Political and Economic Change; Public Policy.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester. Max 2 credits
- Counts as an elective for all diplomas
- No longer fulfills the US government requirement for any diploma

B4570 AP COMPUTER SCIENCE A
AP Computer Science A introduces students to computer science through programming. Fundamental topics include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. AP Computer Science A is equivalent to a first semester, college-level course in computer science.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Required Prerequisites: AP Computer Science Principles or Computer Science I, Algebra II
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Counts as an elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

C4568 AP COMPUTER SCIENCE PRINCIPLES
The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
L1056 AP ENGLISH LANGUAGE AND COMPOSITION

AP English Language and Composition 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. The course focuses on the development and revision of evidence-based analytic and argumentative writing and the rhetorical analysis of nonfiction texts. The course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. There is no prescribed sequence of study.

- Recommended Grade: 11, 12 (College Board does not designate when this course should be offered).
- Required Prerequisites: none
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Students should be able to read and comprehend college-level texts and apply the conventions of standard written English in their writing.
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills an English/language arts requirement for grades 11 or 12 for all diplomas

L1058 AP ENGLISH LITERATURE AND COMPOSITION

AP English Literature and Composition 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. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work’s structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9 and English 10 or teacher recommendation
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills an English/language arts requirement for grades 11 or 12 for all diplomas

X3012 AP ENVIRONMENTAL SCIENCE (L)

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

- Recommended Grade: 12 Required Prerequisites: none
- Recommended Prerequisites: Biology I and Chemistry I
- Credits: 2 semester course, 1 credit per semester. Max 2 credits
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course
- Laboratory course

W2032 AP FRENCH LANGUAGE AND CULTURE

AP French Language and Culture is a course established and copyrighted by the College Board and follows the College Board course guidelines for AP French Language and Culture. The course prepares students to be successful on the AP French Language and Culture exam. The course is not intended to be used as a dual credit course. The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both
contemporary and historical contexts. The course develops students’ awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

● Recommended Grade: 11, 12
● Required Prerequisites: French I, II and III
● Recommended Prerequisites: none
● Credits: 2 semester course, 1 credit per semester. Max 2 credits
● Fulfills a world language requirement for all diplomas
● Counts as a directed elective or elective for all diplomas

S1572 AP HUMAN GEOGRAPHY
AP Human Geography 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. The AP Human Geography course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students employ spatial concepts and landscape analysis to examine socio-economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). Topics include: Geography-Nature and Perspectives, Population and Migration, Cultural Patterns and Processes, Political Organization of Space, Agriculture, Food Production, and Rural Land Use, Industrialization and Economic Development, and Cities and Urban Land Use.

● Recommended Grade: 11, 12
● Required Prerequisites: none
● Recommended Prerequisites: none
● Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
● Credits: 1 to 2 semester course, 1 credit per semester. Max 2 credits
● Counts as an elective for all diplomas

S1564 AP MACROECONOMICS
AP Macroeconomics 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 Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Topics include: Basic Economic Concepts; Measurement of Economic Performance; National Income and Price Determination; Financial Sector; Stabilization Policies; and Economic Growth.

● Recommended Grade: 11, 12
● Required Prerequisites: none
● Recommended Prerequisites: none
● Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
● Credits: 1 to 2 semester course, 1 credit per semester
● Counts as an elective for all diplomas
● Fulfills the economics requirement for all diplomas
● Qualifies as a quantitative reasoning course

S1566 AP MICROECONOMICS
AP Microeconomics 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 Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students’ familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. Topics include: Basic Economic Concepts; Nature and Functions of Product Markets; Factor Markets; and Market Failure and the Role of Government.

● Recommended Grade: 11, 12
● Required Prerequisites: none
● Recommended Prerequisites: none. Students should be able to read a college level textbook and write grammatically correct, complete sentences.
● Credits: 1 to 2 semester course, 1 credit per semester
F4210 AP MUSIC THEORY (L)
AP Music Theory 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. The AP Music Theory course corresponds to two semesters of a typical introductory college music theory course that covers topics such as musicianship, theory, musical materials, and procedures. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Performance is also part of the learning process. Students understand basic concepts and terminology by listening to and performing a wide variety of music.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills fine arts requirement for Core 40 with Academic Honors Diploma
- Laboratory course

X3080 AP PHYSICS 1: ALGEBRA-BASED (L)
AP Physics 1 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 Physics 1: Algebra-based is equivalent to a first-semester college course in algebra-based physics. The course includes Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits.

- Recommended Grade: 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I or Integrated Mathematics I
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course

X3081 AP PHYSICS 2: ALGEBRA-BASED (L)
AP Physics 2 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 Physics 2: Algebra-based is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: AP Physics 1: Algebra-based
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas
- Qualifies as a quantitative reasoning course

S1558 AP PSYCHOLOGY
AP Psychology 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. The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas. Topics include: History and Approaches; Research Methods; Biological Bases of Behavior; Sensation and Perception; States of Consciousness; Learning; Cognition; Motivation and Emotion; Developmental Psychology; Personality; Testing and Individual Differences; Abnormal Behavior; Treatment of Abnormal Behavior; and Social Psychology.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
W2132 AP SPANISH LANGUAGE AND CULTURE
AP Spanish Language and Culture is a course established and copyrighted by the College Board and follows the College Board course guidelines for AP Spanish Language and Culture. The course prepares students to be successful on the AP Spanish Language and Culture exam. The course is not intended to be used as a dual credit course. The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students’ awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

- Recommended Grade: 11, 12
- Required Prerequisites: Spanish I, II, and III
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a world language requirement for the Core 40 with Academic Honors Diploma

M2570 AP STATISTICS
AP Statistics 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. The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Integrated Mathematics III
- Credits: 1 to 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 all diplomas
- Qualifies as a quantitative reasoning course

F4048 AP DRAWING
AP Drawing is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Studio Art Program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The Drawing portfolio addresses issues such as line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth, and mark-making. Students’ portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced laboratory visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills the fine arts requirement for the Core 40 with Academic Honors Diploma

F4050 AP 2-D ART AND DESIGN
AP 2-D Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Studio Art Program consists of three portfolio exams—2-Dimensional Design, 3-Dimensional Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 2-Dimensional Design portfolio addresses issues such as line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth, and mark-making. Students’ portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced laboratory visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills the fine arts requirement for the Core 40 with Academic Honors Diploma
demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. The portfolio will have two sections: Sustained Investigation and Selected works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced laboratory 2-D visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills the fine arts requirement for the Core 40 with Academic Honors Diploma

F4052 AP 3-D ART AND DESIGN
AP 3-D Design is a course established and copyrighted by the College Board. The course is not intended to be used as a dual credit course. The AP Art Program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-quality, artistic investigation, and breadth of work. The 3-D Design portfolio involves decision making about how to use the elements and principles of art as they relate to the integration of depth, space, volume, and surface, either actual or virtual. Students’ portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses. The portfolio will have two sections: Sustained Investigation and Selected works.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Advanced laboratory 3-D visual arts courses
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills the fine arts requirement for the Core 40 with Academic Honors Diploma

S1560 AP UNITED STATES GOVERNMENT AND POLITICS
AP United States Government and Politics 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 U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behavior. They also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they complete a political science research or applied civics project.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Students should be able to read a college level textbook and write grammatically correct sentences.
- Credits: 1 to 2 semester course, 1 credit per semester. Max 2 credits
- Fulfills the government requirement for all diplomas

S1562 AP UNITED STATES HISTORY
AP United States 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 United States History focuses on developing students’ abilities to think conceptually about U.S. history from approximately 1491 to the present and apply historical thinking skills as they learn about the past. Seven themes of equal importance — identity; peopling; politics and power; work, exchange, and technology; America in the world; environment and geography; and ideas, beliefs, and culture — provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester
- Fulfills the US history requirement for all diplomas

S1612 AP WORLD HISTORY MODERN
AP World History Modern students investigate significant events, individuals, developments, and processes in historical periods from
approximately 1200 CE to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, economic systems, social interactions and organization, and technology and innovation.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Students should be able to read and comprehend college-level texts and apply the conventions of Standard Written English in their writing.
- Credits: 2 semester course, 1 credit per semester
- Fulfills the geography history of the world/world history and civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
ENGLISH/LANGUAGE ARTS

COURSES OFFERED:

- English 9 (L1002)
- English 10 (L1004)
- English 11 (L1006)
- English 12 (L1008)
- CCR Bridge: Literacy Ready (L1014)
- English as a New Language (L1012)
- Etymology (L1060)
- Grammar (L1062)
- Journalism (L1080)
- Language Arts Lab (L1010)
- Digital Media (L1084)
- Student Media (L1086)
- American Literature (L1020)
- Biblical Literature (L1022)
- Biographies (L1024)
- Classical Literature (L1026)
- Contemporary Literature (L1054)
- Dramatic Literature (L1028)
- English Literature (L1030)
- Ethnic Literature (L1032)
- Film Literature (L1034)
- Indiana Literature (L1038)
- Novels (L1042)
- Poetry (L1044)
- Short Stories (L1046)
- World Literature (L1052)
- Critical Thinking and Argumentation (L1074)
- Debate (L1070)
- Speech (L1076)
- Advanced Composition (L1098)
- Composition (L1090)
- Creative Writing (L1092)
- Technical Communications (L1096)
- Developmental Reading (L1120)

L1002 ENGLISH 9

English 9, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 9
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1004 ENGLISH 10

English 10, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and oral communication, focusing on literature within an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository (informative) and argumentative/persuasive compositions, and sustained research assignments. Students deliver grade-appropriate oral presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: English 9 or teacher recommendation
- Credits: 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1006 ENGLISH 11

English 11, an integrated English course based on the Indiana Academic Standards for English/Language Arts in Grades 11-12, is a study of language, literature, composition, and oral communication focusing on literature with an appropriate level of complexity for this grade band. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts and tables. Students write and deliver grade-appropriate multimedia presentations and
access, analyze, and evaluate online information.

- **Recommended Grade:** 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9 and English 10 or teacher recommendation
- **Credits:** 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

**L1008 ENGLISH 12**

English 12, an integrated English course based on the Indiana Academic Standards for English/Language Arts for Grades 11-12, 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 in classic and contemporary literature balanced with nonfiction. Students write narratives, responses to literature, academic essays (e.g. analytical, persuasive, expository, summary), and more sustained research assignments incorporating visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

- **Recommended Grade:** 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, and English 11 or teacher recommendation
- **Credits:** 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

**L1014 CCR BRIDGE: LITERACY READY**

CCR Bridge: Literacy Ready is an innovative, dynamic course built to help students master the literacy skills needed for three core subject areas—English, social science, and science. CCR Bridge: Literacy Ready consists of eight units: three in history, three in English and two in science. Content of each of the disciplines is at the forefront of the curriculum, while disciplinary literacy skills are emphasized through reading and writing assignments based on the content. The focus is on truly understanding how to read and interpret texts in the discipline on a college level. Students in this course want to be college bound but have not met the requirements necessary to fulfill that goal. Schools are expected to embed Indiana Academic Standards for English/Language Arts and Content Area Literacy into the curriculum.

- **Recommended Grade:** 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Must be students who want to attend college, but who have not passed the Grade 10 English ISTEP+ (or old English ECA) and have scored below a 45 on the PSAT/ OR students who score below proficient on a diagnostic test.
- **Credits:** 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

**L1012 ENGLISH AS A NEW LANGUAGE**

English as a New Language, an integrated English course based on the WIDA English Language Development (ELD) Standards, is the study of language, literature, composition and oral communication for English learners (ELs) so that they improve their proficiency in listening, speaking, reading, writing and comprehension of standard English. Students study English vocabulary used in fictional texts and content-area texts, speak and write English so that they can function within the regular school setting and an English-speaking society, and deliver oral presentations appropriate to their respective levels of English proficiency.

Recommended Grade: **Recommended Grade: 9, 10, 11, and 12.** The intent of the ENL course is to move students as successfully, smoothly, and rapidly as possible into the Core 40 English courses offered in grades 9-12.

- **Required Prerequisites:** none
- **Recommended Prerequisites:** English proficiency placement test results
- **English/Language Arts credit (1012):** If ENL course work addresses Indiana’s Academic Standards for English/Language Arts and is based on general ELA curriculum and student’s Individualized Learning Plan, up to 8 credits accrued can be counted as the required English/Language Arts credits for all diplomas.
- **Fulfills an English Language Arts requirement for all diplomas**
- **World Language credit (2188):** If ENL course work addresses Indiana’s Academic Standards for World Languages and is taken concurrently with another
  - **English/Language Arts course, up to 8 credits accrued may count as World Language credits for all diplomas**

**L1060 ETYMOLOGY**

Etymology, a language studies course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the derivation of English words and word families from their roots in ancient and modern languages (Latin, Greek, Germanic, and Romance
Languages). Students analyze meanings of English words by examining roots, prefixes, and suffixes. Students analyze the connotative and denotative meaning of words in a variety of contexts and the reasons for language change. Students write about word history and semantics in texts that require etymological sensitivity, such as Renaissance poetry or works in translation.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: 4 credits in English Language Arts
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas
- NOTE: Students are strongly encouraged to combine this course with a literature or composition course that they take before, concurrently, or after the course.

L1062 GRAMMAR
Grammar, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the English language system. Students examine and apply the conventions of oral and written expression that include syntax, usage, punctuation, and spelling. Students learn grammatical terminology, study grammar in the context of reading and writing, and apply grammatical concepts in writing and speaking.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas
- NOTE: Students are strongly encouraged to combine this course with a literature or composition course that they take before, concurrently, or after the course.

L1080 JOURNALISM
Journalism, a course based on the Indiana Academic Standards for English/Language Arts and the Indiana High School Journalism Standards, is a study of news elements, journalism history, First Amendment law, ethics, fact and opinion, copy editing, news, and features as they apply to print and digital media products. It includes a comparison study of journalistic writing to other types of English writing with practical application of news, features, editorials, reviews, columns, and digital media writing forms. For the second credit: Students continue to develop journalistic writing skills in addition to studying graphic design, advertising, public relations, photojournalism and emerging media development and design. By the end of the semester, students write, shoot, and design stories for print and digital media products.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester. Second credit may be subtitled Advanced to allow for a successive semester of instruction at an advanced level.
- English/Language Arts credit (1080): Journalism course work addresses the Indiana Academic Standards for English/Language Arts, the credits accrued can be counted as part of the eight (8) required English/Language Arts credits for all diplomas.
- Counts as an elective for all diplomas
- NOTE: This is not a student publications course. The designated school newspaper or yearbook course is Student Media (1086).

L1010 LANGUAGE ARTS LAB
Language Arts Lab is a supplemental course that provides students with individualized or small group instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English/Language Arts focusing on the writing standards. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 8 credits. This course allows for successive semesters of instruction for students who need additional support in any or all aspects of the writing standards.
- Counts as an elective for all diplomas.

L1084 DIGITAL MEDIA
Digital Media, a course based on the Indiana Academic Standards for English/Language Arts and Media Literacy Standards, is a study of media literacy and production skills. This course examines the impact of informational, narrative, and persuasive media on everyday life. This course will focus on changes in media and includes practice in broadcast journalism, audio/visual storytelling, multimedia storytelling, as well as different platforms such as online and social media. Students will analyze local, national, and global media through the lens of law, ethics, and
Students use course content to become knowledgeable consumers and producers of media. For the second credit: Students continue to develop media production skills in addition to continuing critical media analysis. By the end of the semester, students write and produce media projects.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 or 2 semester course, 1 credit per semester. Second credit may be subtitled Advanced to allow for a successive semester of instruction at an advanced level. English/Language Arts credit (1084): Digital Media course work addresses the Indiana Academic Standards for English/Language Arts, credits accrued can be counted as part of the eight (8) required English/Language Arts credits for all diplomas.
- **Counts as an elective for all diplomas**

**L1086 STUDENT MEDIA**

Student Media, a course based on the High School Journalism Standards and the Student Media Standards, is the continuation of the study of Journalism. Students demonstrate their ability to do journalistic writing and design for high school media, including school newspapers, yearbooks, and a variety of other media formats. Students follow the ethical principles and legal boundaries that guide scholastic journalism. Students express themselves publicly with meaning and clarity for the purpose of informing, entertaining, or persuading. Students work on high school media staffs so that they may prepare themselves for career paths in journalism, communications, writing, or related fields.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Journalism, Digital Media, or teacher recommendation
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level or in different media types where defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills the Fine Arts requirement for the Core 40 with Academic Honors.**
- **NOTE:** This is the designated School Media course, including newspaper and yearbook.

**L1020 AMERICAN LITERATURE**

American Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of representative works and authors of the United States. Students read, analyze, evaluate, critique, and actively respond to a wide variety of literary genres that reflect American culture, including quality works of various ethnic and cultural minorities. Students compare readings and media from literature, history, and other subjects by demonstrating how the ideas and concepts presented in the works are interconnected, distinctly American, and important to an understanding of the development of the current culture. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within American Literature curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, or teacher recommendation
- **Credits:** 1 to 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

**L1022 BIBLICAL LITERATURE**

Biblical Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the Bible, viewed from a literary standpoint, as a source of a wide variety of literary patterns, themes, and conventions. Students examine the different books in relation to the various historical time frames of the books and in relation to related literature as it pertains to Biblical themes. Students read, discuss, and write about Biblical references (allusions) in both classical and modern literature, formation of a canonical Bible, inclusion of apocryphal and heretical writings, oral versus literate transmission of sacred history and doctrine, and questions and problems of interpretation. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Recommended Prerequisites: English 9, English 10, or teacher recommendation
- **Credits:** 1 to 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

**L1024 BIOGRAPHIES**

Biographies, a course based on the Indiana Academic Standards for English/Language Arts, is a study of outstanding examples of biographical
literature from various historical eras, cultures, and authors (both men and women). Students examine autobiographies, legendary narratives of historical figures, and hagiographies (venerated persons). Students analyze works written for different purposes, such as moralistic, inspirational, entertainment, and cautionary. Students analyze the assumptions of the author and the relationship between the author and the subject of the biography in order to determine reliability and validity of the work. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, or teacher recommendation
- **Credits:** 1 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

### L1026 CLASSICAL LITERATURE

Classical Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of Greek and Roman Empire literature by the major authors, such as Aristotle, Cicero, Dante, Euripides, Homer, Ovid, Plato, Plutarch, Sappho, Sophocles, St. Augustine, Virgil, and others. Students examine a variety of literary genres, such as tragedy, comedy, epic, lyric, novel, oratory, and others. Students analyze themes as they relate to the transition from oral to literate cultures, the emergence of cities and empires, the use of mythology, and the rise and fall of democracy. Students analyze how classical literary patterns, themes, and conventions have influenced modern literature. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within the curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, or teacher recommendation
- **Credits:** 1 to 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

### L1054 CONTEMPORARY LITERATURE

Contemporary Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how post-1950s literature from around the world, such as North and South America, Europe and Great Britain, the Middle East, and post-colonial Africa and Asia, addresses contemporary issues. Students examine multiple genres to develop a sense of how particular genres are used today to represent ideas and events. Students analyze different theories and methods of textual criticism especially theories currently popular. Students analyze how the interpretations and themes of contemporary literature read in this course relate to the time period and to historical issues. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within the curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, or teacher recommendation
- **Credits:** 1 to 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

### L1028 DRAMATIC LITERATURE

Dramatic Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of plays and literary art as different from other literary genres. Students view live, televised, or filmed productions and stage scenes from plays or scripts. Students examine tragedies, comedies, melodramas, musicals or operas created by important playwrights and screenwriters representing the literary movements in dramatic literature. Students analyze how live performance alters interpretation from text and how developments in acting and production have altered the way we interpret plays or scripts. Students analyze the relationship between the development of dramatic literature as entertainment and as a reflection of or influence on the culture. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within the curriculum.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** English 9, English 10, or teacher recommendation
- **Credits:** 1 or 2 semester course, 1 credit per semester
- **Fulfills an English/Language Arts requirement for all diplomas**

### L1030 ENGLISH LITERATURE

English Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of representative works of the English-speaking authors associated with the Commonwealth of Nations, including England, Scotland, Ireland, Wales, Canada, Newfoundland,
Australia, New Zealand, India, South Africa, Kenya, Botswana, and others. Students examine a wide variety of literary genres that reflect the English-speaking peoples from the Anglo-Saxon Period to the present. Students analyze how the ideas and concepts presented in the works are both interconnected and distinctly reflective of the cultures and the countries in which they were written. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1032 ETHNIC LITERATURE
Ethnic Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of literature focusing on specific multicultural issues produced by writers representing various ethnic cultures. Students examine works exploring ethnic experiences and ideas as well as the contributions of authors to multicultural themes. Students analyze the expressions of cultural identities within ethnic literature and how problems or issues of interest to a given group relate or interconnect with national issues and history. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1034 FILM LITERATURE
Film Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about the history of film, the reflection or influence of film on the culture, and issues of interpretation, production and adaptation. Students examine the visual interpretation of literary techniques and auditory language in film and the limitations or special capacities of film versus text to present a literary work. Students analyze how films portray the human condition and the roles of men and women and the various ethnic or cultural minorities in the past and present. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1038 INDIANA LITERATURE
Indiana Literature a course based on the Indiana Academic Standards for English/Language Arts, is a study of works produced by those who were born in, raised, or lived most of their lives in Indiana and works about Indiana or its famous persons. Students examine representative works of various historical periods, works from the various literary movements, and works that reflect unique aspects of Indiana culture. Students analyze and evaluate contributions of Indiana literature to specific genres and to the body of American literature or media in the past and present. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1042 NOVELS
Novels, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the distinct features of the novel, such as narrative and fictional elements of setting, conflict, climax, and resolution, and may be organized by historical periods, themes, or authors. Students examine novels of a given period, such as Victorian, the Modern Period, or Contemporary Literature, and what distinguishes novels from short stories, epics, romances, biographies, science fiction, and others. Students analyze novels by various important authors from the
past and present or sets of novels from a specific era or across several eras. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1044 POETRY

Poetry, a course based on the Indiana Academic Standards for English/Language Arts, is a study of poetic works, the interpretation of poetry, and the variety of structures, devices, and themes that differentiate one type of poetry from another. Students examine a wide variety of major poetic works from the English-speaking world and English translations of important works from the non-English-speaking world. Students analyze the impact of aural devices, such as meter, alliteration, assonance, and rhyme, on the overall interpretation of a poem and how poetry is a form of literary expression that has prevailed through the ages. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1046 SHORT STORIES

Short Stories, a course based on the Indiana Academic Standards for English/Language Arts, is a study of the distinct features of the short story, such as being tightly focused narrative fiction. The course may be organized by historical periods, themes, or authors. Students examine short stories with modernist and contemporary themes by a variety of authors from the perspective of audience, purpose, and historical development. Students analyze what distinguishes the short story genre from other literary genres, such as the novels, epics, romances, biographies, etc. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1052 WORLD LITERATURE

World Literature, a course based on the Indiana Academic Standards for English/Language Arts, is a study of ancient and modern representative works by major authors from six continents: Africa, Asia, Australia, Europe, North America, and South America. Students examine a wide variety of literary genres and themes. Students analyze how the ideas and concepts presented in the works are both interconnected and reflective of the cultures and historical periods of the countries represented by the authors. Course can be offered in conjunction with a composition course, or schools may embed Indiana Academic Standards for English/Language Arts writing standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1074 CRITICAL THINKING AND ARGUMENTATION

Critical Thinking and Argumentation, a course based on the Indiana Academic Standards for English/Language Arts, is a study of deductive and inductive logic, including logical fallacies, and should challenge students to think critically, analytically, and philosophically. Students learn to formulate thoughtful inquiry questions, connect ideas or concepts, challenge ideas and concepts, and rephrase ideas when appropriate. Active class participation is essential, including persistent questioning, rational discussion, and reasoned argumentation. Students make comments that reflect the development of logic (a line of reasoning), represent a clear point of view, and involve evidence of support (data, examples, anecdotes, documents, information from a variety of sources). Students use the same Standard English conventions for oral speech that they use in their writing.

- Recommended Grade: 11, 12
L1070 DEBATE
Debate, a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the basic principles of debate involving support for the basic types of arguments (induction, deduction, causation) and debate strategies (affirmative or negative argument construction and extension, case development, refutation or rebuttal of argument claims and evidence, and persuasive speaking).

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Speech or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester. The nature of this course allows for the second semester of instruction at an advanced level.
- 1 credit fulfills an English/Language Arts requirement for all diplomas, additional credits fulfill elective credit for all diplomas

L1076 SPEECH
Speech, a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and multimedia presentations, including viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Students use the same Standard English conventions for oral speech that they use in their writing.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1098 ADVANCED COMPOSITION
Advanced Composition, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies of exposition and persuasion. Students write expository critiques of nonfiction selections, literary criticism of fiction selections, persuasive compositions, and research reports in addition to other appropriate writing tasks. Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, Composition, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1090 COMPOSITION
Composition, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies of narration, description, exposition, and persuasion. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. Students read classic and contemporary literature or articles and use appropriate works as models for writing. Students write a variety of types of compositions with a focus on fictional narratives, reflective compositions, academic essays, and responses to literature. Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 or 2 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

L1092 CREATIVE WRITING
Creative Writing, a course based on the Indiana Academic Standards for English/Language Arts, is a study and application of the rhetorical writing strategies for prose and poetry. Using the writing process, students demonstrate a command of vocabulary, the nuances of language and vocabulary, English language conventions, an awareness of the audience, the purposes for writing, and the style of their own writing. Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

**L1096 TECHNICAL COMMUNICATIONS**

Technical Communication, a course based on the Indiana Academic Standards for English/Language Arts, is the study and application of the processes and conventions needed for effective technical writing-communication. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. Course can be offered in conjunction with a literature course, or schools may embed Indiana Academic Standards for English/Language Arts reading standards within curriculum.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: English 9, English 10, or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Fulfills an English/Language Arts requirement for all diplomas

**L1120 DEVELOPMENTAL READING**

Developmental Reading is a supplemental course that provides students with individualized instruction designed to support success in completing course work aligned with the Indiana Academic Standards for English/Language Arts focusing on the Reading Standards for Literature and Nonfiction. All students should be concurrently enrolled in an English course in which class work will address all of the Indiana Academic Standards.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 8 credits maximum. This course allows for successive semesters of instruction for students who need additional support in vocabulary development and reading comprehension.
- Counts as an elective for all diplomas
## FINE ARTS

### COURSES OFFERED:

- **Dance Choreography: Ballet, Modern, Jazz, or Ethnic-Folk (L) (F4142)**
- **Dance Performance: Ballet, Modern, Jazz, or Ethnic-Folk (L) (F4146)**
- **Applied Music (F4200)**
- **Beginning Chorus (L) (F4182)**
- **Intermediate Chorus (L) (F4186)**
- **Advanced Chorus (L) (F4188)**
- **Choral Chamber Ensemble (L) (F4180)**
- **Vocal Jazz (L) (F4184)**
- **Beginning Concert Band (L) (F4160)**
- **Intermediate Concert Band (L) (F4168)**
- **Advanced Concert Band (L) (F4170)**
- **Jazz Ensemble (F4164)**
- **Beginning Orchestra (L) (F4166)**
- **Intermediate Orchestra (L) (F4172)**
- **Advanced Orchestra (L) (F4174)**
- **Instrumental Ensemble (L) (F4162)**
- **Music History and Appreciation (F4206)**
- **Piano and Electronic Keyboard (L) (F4204)**
- **Musical Theatre (F0518)**

### F4142 DANCE CHOREOGRAPHY: BALLET, MODERN, JAZZ, OR ETHNIC-FOLK (L)

Dance Choreography is based on the Indiana Academic Standards for Dance. Learning activities in choreography are sequential and systematic and allow students to exhibit self-expression. A wide variety of materials and experiences are used in order to provide students with the knowledge, skills, and appreciation of the multi-styled and multicultural dance expressions. Choreographic activities provide students opportunities to participate in roles as a soloist, a choreographer or leader, and in a subject role. Students also explore a wide variety of choreographic philosophies as well as administrative and media skills necessary for the promotion and documentation of works to be performed. Students experience and learn to use appropriate terminology to describe, analyze, interpret, and critique dance compositions by professional individuals or companies.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **A non-licensed dance instructor may be contracted to provide instruction with a licensed Fine Arts teacher serving as the teacher of record**
- **Laboratory course**

### F4146 DANCE PERFORMANCE: BALLET, MODERN, JAZZ, OR ETHNIC-FOLK (L)

Dance Performance is based on the Indiana Academic Standards for Dance. Sequential and systematic learning experiences are provided in the specific genre offered, whether it is Ballet, Modern, Jazz, or Ethnic-Folk. Activities utilize a wide variety of materials and experiences and are designed to develop techniques appropriate within the genre, including individual and group instruction in performance repertoire and skills. Students develop the ability to express their thoughts, perceptions, feelings, and images through movement. The performance class provides opportunities for students to experience degrees of physical prowess, technique, flexibility, and the study of dance performance as an artistic discipline and as a form of artistic communication. Students describe, analyze, interpret, and judge live and recorded dance performances of professional dancers and companies in the genre. They also become aware of the career opportunities in dance.

- **Recommended Grade:** 9, 10, 11, 12
F4200 APPLIED MUSIC (L)
Applied Music is based on the Indiana Academic Standards for High School Choral or Instrumental Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students' abilities in performing, creating, and responding to music.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

F4182 BEGINNING CHORUS (L)
Beginning Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Beginning Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

F4186 INTERMEDIATE CHORUS (L)
Intermediate Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Intermediate Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Beginning Chorus
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course
**F4188 ADVANCED CHORUS (L)**
Advanced Chorus is based on the Indiana Academic Standards for High School Choral Music. Students taking Advanced Chorus develop musicianship and specific performance skills through ensemble and solo singing. This class includes the study of quality repertoire in the diverse styles of choral literature appropriate in difficulty and range for the students. Chorus classes provide opportunities for performing, creating, and responding to music. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.
- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Beginning and Intermediate Chorus
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4180 CHORAL CHAMBER ENSEMBLE (L)**
Choral Chamber Ensemble is based on the Indiana Academic Standards for High School Choral Music. Student musicianship and specific performance skills in this course are enhanced through specialized small group instruction. The activities expand the repertoire of a specific genre. Chamber ensemble classes provide instruction in creating, performing, listening to, and analyzing music in addition to focusing on specific subject matter. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.
- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** One year or two semesters of Beginning Chorus
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4184 VOCAL JAZZ (L)**
Vocal Jazz is based on the Indiana Academic Standards for High School Choral Music. Students in this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of vocal jazz. Instruction includes the study of the history and formative and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.
- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** One year or two semesters of Beginning Chorus
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4160 BEGINNING CONCERT BAND (L)**
Beginning Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be
scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4168 INTERMEDIATE CONCERT BAND (L)**
Intermediate Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course includes a balanced comprehensive study of music that develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Students study a varied repertoire of developmentally appropriate concert band literature and develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Beginning Concert Band
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4170 ADVANCED CONCERT BAND (L)**
Advanced Concert Band is based on the Indiana Academic Standards for High School Instrumental Music. This course provides students with a balanced comprehensive study of music through the concert band, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer’s intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Beginning and Intermediate Concert Band
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory course**

**F4164 JAZZ ENSEMBLE (L)**
Jazz Ensemble is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course develop musicianship and specific performance skills through group and individual settings for the study and performance of varied styles of instrumental jazz. Instruction includes the study of the history, formative, and stylistic elements of jazz. Students develop their creative skills through improvisation, composition, arranging, performing, listening, and analyzing. A limited amount of time outside of the school day may be scheduled for 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 of the school day that support and extend the learning in the classroom. Student participants must also be receiving instruction in another band or orchestra class offering at the discretion of the director.
F4166 BEGINNING ORCHESTRA (L)
Beginning Orchestra is based on the Indiana Academic Standards for High School Instrumental Music. Students in this ensemble are provided with a balanced comprehensive study of music through the orchestra, string and/or full orchestra, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of orchestral literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer’s intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

F4172 INTERMEDIATE ORCHESTRA (L)
Intermediate Orchestra is based on the Indiana Academic Standards for High School Instrumental Music. Students in this ensemble are provided with a balanced comprehensive study of music through the orchestra, string and/or full orchestra, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of orchestral literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer’s intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

F4174 ADVANCED ORCHESTRA (L)
Advanced Orchestra is based on the Indiana Academic Standards for High School Instrumental Music. Students in this ensemble are provided with a balanced comprehensive study of music through the orchestra, string and/or full orchestra, which develops skills in the psychomotor, cognitive, and affective domains. Ensemble and solo activities are designed to develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of orchestral literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer’s intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.
**F4162 INSTRUMENTAL ENSEMBLE (L)**
Instrumental Ensemble is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of chamber ensemble and solo literature, which develops skills in the psychomotor, cognitive and affective domains. Students develop and refine elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature as pertaining to chamber ensemble and solo literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer’s intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. A limited number of public performances may serve as a culmination of daily rehearsal and musical goals. Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.

| Recommended Grade: 10, 11, 12 |
| Required Prerequisites: none |
| Recommended Prerequisites: Beginning and Intermediate Orchestra |
| Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. |
| Counts as a directed elective or elective for all diplomas |
| Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma |
| Laboratory course |

**F4206 MUSIC HISTORY AND APPRECIATION**
Music History and Appreciation is based on the Indiana Academic Standards for Music and standards for this specific course. Students receive instruction designed to explore music and major musical styles and periods through understanding music in relation to both Western and Non-Western history and culture. Activities include analyzing and describing music; evaluating music and music performances; and understanding relationships between music and the other arts, as well as disciplines outside of the arts.

| Recommended Grade: 9, 10, 11, 12 |
| Required Prerequisites: none |
| Recommended Prerequisites: none |
| Credits: 1 or 2 semester course, 1 credit per semester. The nature of this course allows for two successive semesters of instruction at an advanced level provided that defined proficiencies and standards are utilized. |
| Counts as a directed elective or elective for all diplomas |
| Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma |

**F4204 PIANO AND ELECTRONIC KEYBOARD (L)**
Piano and Electronic Keyboard is based on the Indiana Academic Standards for High School Music Technology and Instrumental Music. Students taking this course are offered keyboard classes in order to develop music proficiency and musicianship. Students perform with proper posture, hand position, fingering, rhythm, and articulation; compose and improvise melodic and harmonic material; create and perform simple accompaniments; listen to, analyze, sight-read, and study a variety of keyboard literature; study the elements of music as exemplified in a variety of styles; and make interpretive decisions.

| Recommended Grade: 9, 10, 11, 12 |
| Required Prerequisites: none |
| Recommended Prerequisites: none |
| Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized. |
| Counts as a directed elective or elective for all diplomas |
| Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma |
| Laboratory Course |

**F0518 MUSICAL THEATRE**
Musical Theatre is based on the Indiana Academic Standards for Theatre. Students in this course study the history of musical theatre and its place in today’s society. They participate in staging, choreographing, rehearsing, and performing an original or existing musical work. This class may be taught collaboratively among music, theatre, dance, and visual arts faculty. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory Course**

**F4244 TECHNICAL THEATRE**

Technical Theatre is based on the Indiana Academic Standards for Theatre. Students enrolled in Technical Theatre actively engage in the process of designing, building, managing, and implementing the technical aspects of a production. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory Course**

**F4252 ADVANCED TECHNICAL THEATRE (L)**

Advanced Technical Theatre is based on the Indiana Academic Standards for Theatre. Students enrolled in Advanced Technical Theatre actively lead and supervise in the process of designing, building, managing, programming, drafting, and implementing the technical aspects of a production. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students investigate technical theatre careers then develop a plan for potential employment or further education through audition, interview or presentation of a portfolio. Students also attend and critique theatrical productions and volunteer to support theatre in their community.

- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Technical Theatre I and II (L)
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
- **Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma**
- **Laboratory Course**

**F4242 THEATRE ARTS (L)**

Theatre Arts is based on the Indiana Academic Standards for Theatre. Students enrolled in Theatre Arts read and analyze plays, create scripts and theatre pieces, conceive scenic designs, and develop acting skills. These activities incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- **Counts as a directed elective or elective for all diplomas**
F4240 ADVANCED THEATRE ARTS (L)
Advanced Theatre Arts is based on the Indiana Academic Standards for Theatre. Students enrolled in Advanced Theatre Arts read and analyze plays and apply criteria to make informed judgments. They draw on events and experiences to create scripted monologues and scenes, create scenic designs for existing plays, and build characters through observation, improvisation and script analysis. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore careers in theatre arts and begin to develop a portfolio of their work. They also attend and critique theatre productions and identify ways to support the theatre in their community.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Theatre Arts I and II (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4246 THEATRE ARTS HISTORY
Theatre Arts History is based on the Indiana Academic Standards for Theatre. Students enrolled in Theatre Arts History read and discuss significant plays from various periods and explore the interrelationship between theatre and history. These activities should incorporate elements of culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

F4245 THEATRE ARTS, SPECIAL TOPICS
Theatre Arts, Special Topics is based on the Indiana Academic Standards for Theatre. Students taking this course focus on a specific subject related to theatre arts, such as: Shakespeare, Children’s Theatre, Directing, Arts Management, and other specialized areas of study. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students explore career opportunities in the theatre, attend and critique theatrical productions, and recognize the responsibilities and the importance of individual theatre patrons in their community.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Theatre Arts
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4248 THEATRE PRODUCTION
Theatre Production is based on the Indiana Academic Standards for Theatre. Students enrolled in Theatre Production take on responsibilities associated with rehearsing and presenting a fully-mounted theatre production. They read and analyze plays to prepare for production; conceive and realize a design for a production, including set, lighting, sound and costumes; rehearse and perform roles in a production; and direct or serve as assistant director for a production. These activities should incorporate elements of theatre history, culture, analysis, response, creative process, and integrated studies. Additionally, students investigate a theatre arts career then develop a plan for potential employment or further education through audition, interview, or presentation of a portfolio. Students also attend and critique theatrical productions and volunteer to support theatre in their community.

- Recommended Grade: 9, 10, 11, 12
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- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4024 ART HISTORY
Art History is a course based on the Indiana Academic Standards for Visual Art. Students taking Art History engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production. Students study works of art and artifacts from world cultures, engage in historically relevant studio activities; utilize research skills to discover social, political, economic, technological, environmental, and historical trends and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

F4040 CERAMICS (L)
Ceramics is a course based on the Indiana Academic Standards for Visual Art. Students in ceramics engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create works of art in clay utilizing the processes of hand building, molds, wheel throwing, slip and glaze techniques, and the firing processes. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4082 DIGITAL DESIGN (L)
Digital Design is a course based on the Indiana Academic Standards for Visual Art. Students in digital design engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. They incorporate desktop publishing, multi-media, digitized imagery, computer animation, and web design. Students reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4060 DRAWING (L)
Drawing is a course based on the Indiana Academic Standards for Visual Art. Students in drawing engage in sequential learning
experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create drawings utilizing processes such as sketching, rendering, contour, gesture, and perspective drawing and use a variety of media such as pencil, chalk, pastels, charcoal, and pen and ink. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

Fiber Arts is a course based on the Indiana Academic Standards for Visual Art. Students in fiber arts engage in sequential learning experiences that encompass art history, art criticism, aesthetics, and production and lead to the creation of portfolio quality works. Students create fiber art works utilizing processes such as loom and off-loom construction, dyeing, coiling, and stitchery. They reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. Students utilize the resources of art museums, galleries, and studios, and identify art-related careers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

Fine Arts Connections is a course based on the Indiana Academic Standards for Visual Art, Music, Theatre, and Dance. In this course, students make connections among experiences in the four arts disciplines and integrate them in studies of all academic disciplines. They create works encompassing multiple disciplines, literacies, and sign systems, reflect upon and refine their work; explore cultural and historical connections; analyze, interpret, theorize, and make informed judgments about works and the nature of the arts. They incorporate presentational skills and utilize the resources of the arts community, identifying related careers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Two or more credits in visual art, music, theatre, or dance.
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
F4004 ADVANCED TWO-DIMENSIONAL ART (L)

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4002 INTRODUCTION TO THREE-DIMENSIONAL ART (L)

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4006 ADVANCED THREE-DIMENSIONAL ART (L)

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to Three-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory Course

F4064 PAINTING (L)

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

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

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

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

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

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Two-Dimensional Art (L), Introduction to ThreeDimensional Art (L)
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course
advanced level provided that defined proficiencies and content standards are utilized.

- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course
HEALTH AND WELLNESS/PHYSICAL EDUCATION

COURSES OFFERED:

- Health & Wellness Education (P3506)
- Current Health Issues (P3508)
- Physical Education I (L) (P3542)
- Physical Education II (L) (P3544)
- Elective Physical Education (P3560)

P3506 HEALTH AND WELLNESS EDUCATION

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: 8th grade health education
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills the Health and Wellness requirement for all diploma types

P3508 CURRENT HEALTH ISSUES

Current Health Issues, an elective course that can be aligned to Indiana’s Academic Standards for Health and Wellness, focuses on specific health issues and/or emerging trends in health and wellness, but not limited to: personal health and wellness; non-communicable and communicable diseases; nutrition; mental and emotional health; tobacco-prevention; alcohol and other drug-prevention; human development and family health; health care and/or medical treatments; and national and/or international health issues. This course provides students with the knowledge and skills of health and wellness core concepts, analysis of influences, access to information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Health and Wellness course
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Counts as an elective requirement for all diplomas

P3542 PHYSICAL EDUCATION I (L)

Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Grade 8 Physical Education
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
- Adapted physical education must be offered, as needed, in the least restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity.
P3544 PHYSICAL EDUCATION II (L)
Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not included in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all of which are within the framework of the skills, knowledge and confidence needed by the student for a lifetime of healthful physical activity and fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Physical Education I
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Fulfills part of the Physical Education requirement for all diplomas
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
- Adapted physical education must be offered, as needed, in the least-restricted environment and must be based upon an individual assessment.
- As a designated laboratory course, 25% of course time must be spent in activity.

P3560 ELECTIVE PHYSICAL EDUCATION (L)
Elective Physical Education, a course based on selected standards from Indiana’s Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. A minimum of two of the following activities should be included: team sports; dual sports activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. Students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness. Ongoing assessment includes both written and performance-based skill evaluation. Individual assessments may be modified for individuals with disabilities, in addition to those with IEPs and 504 plans (e.g., chronic illnesses, temporary injuries, obesity, etc.). See 511 IAC 7-27-9, 7-27-11.
- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Physical Education I and II
- Credits: 1 credit per semester, maximum of 8 credits
- Counts as an elective requirement for all diplomas
- The nature of this course allows for successive semesters of instruction provided defined proficiencies and content standards are utilized.
- Classes are co-educational unless the activity involves bodily contact or groupings based on an objective standard of individual performance developed and applied without regard to gender.
MATHEMATICS

COURSES OFFERED:

- Algebra I (M2520)
- Algebra I Lab (M2516)
- Algebra II (M2522)
- CCR Bridge: Math Ready (M2514)
- Finite Mathematics (M2530)
- Geometry (M2532)
- Mathematics Lab (M2560)
- Pre-Calculus: Algebra (M2564)
- Pre-Calculus: Trigonometry (M2566)
- Probability and Statistics (M2546)
- Quantitative Reasoning (M2550)

M2520 ALGEBRA I

Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of six strands: Number Systems and Expressions; Functions; Linear Equations, Inequalities, and Functions; Systems of Equations and Inequalities; Quadratic and Exponential Equations and Functions; and Data Analysis and Statistics. These critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students will also engage in methods for analyzing, solving, and using quadratic functions. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas
- 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 diploma should receive credit for Algebra I by the end of Grade 9

M2516 ALGEBRA I LAB

Algebra I Lab is a mathematics support course for Algebra I. Algebra I Lab is taken while students are concurrently enrolled in Algebra I. This 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.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement 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 I Lab is designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year.

M2522 ALGEBRA II

Algebra II builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Algebra II is made up of seven strands: Data Analysis, Statistics, and Probability; Arithmetic and Structure of Expressions; Functions; Systems of Equations and Inequalities; Quadratic Equations and Functions; Exponential and Logarithmic Equations and Functions; and Polynomial, Rational, and Other Equations and Functions. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I
M2514 CCR BRIDGE: MATH READY
The CCR Bridge: Math Ready course will include and reinforce the Algebra I, Geometry, Algebra II, and Statistics skills necessary to be ready for an entry-level college math course. This course emphasizes understanding of math concepts rather than just memorizing procedures. Math Ready students learn the context behind the procedure (e.g., why to use a certain formula or method to solve a problem). This equips them with higher-order thinking skills in order to apply math skills, functions, and concepts in different situations. The course is intended for students who currently have achieved the minimum math requirements for college entry. The content of this course is designed to enhance students’ math skills so that they are ready for college-level math assignments. It is not designed to prepare students for college-level math in STEM majors.

- Recommended Grade: 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Analytical Algebra II or Integrated Mathematics III
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

M2530 FINITE MATHEMATICS
Finite Mathematics is a collection of mathematical topics, frequently used in business or public policy contexts. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Math is made up of five strands: Sets; Matrices; Networks; Optimization; and Probability. The skills listed in these strands indicate what students should know and be able to do in Finite Math. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Integrated Mathematics III or Analytical Algebra II
- Credits: 1 or 2 semester course, 1 credit per semester,
- Fulfills a Mathematics course requirement for all diplomas

M2532 GEOMETRY
Geometry formalizes and extends students’ geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Seven critical areas comprise the Geometry course: Logic and Proofs; Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-dimensional Solids. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I
- 2 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement 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 diploma

M2560 MATHEMATICS LAB
Mathematics Lab provides students with individualized instruction designed to support success in completing mathematics coursework aligned with Indiana’s Academic Standards for Mathematics. Mathematics Lab is to be taken in conjunction with a Core 40 mathematics course, and the content of Mathematics Lab should be tightly aligned to the content of its corresponding course. Mathematics Lab should not be offered in conjunction with Algebra I or Integrated Mathematics I; instead, schools should offer Algebra I Lab or Integrated Mathematics I Lab to provide students with rigorous support for these courses.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- 1 semester course, 1 credit per semester, 8 credits maximum
- Fulfills an elective course requirement for all 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.

M2564 PRE-CALCULUS: ALGEBRA
Pre-Calculus: Algebra extends the foundations of algebra and functions developed in previous courses to new functions, including exponential and logarithmic functions, and to sequences and series. The course provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Pre-Calculus: Algebra is made up of five strands: Functions; Quadratic, Polynomial, and Rational Equations and Functions; Exponential and Logarithmic Functions; Sequences and Series; and Conics. The course is designed for students who expect math to be a major component of their future college and career experiences, and as such it is designed to provide students with strong foundations for calculus and other higher-level math courses. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

M2566 PRE-CALCULUS: TRIGONOMETRY
Pre-Calculus: Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, finance, and nearly all other STEM disciplines. Trigonometry consists of six strands: Unit Circle; Triangles; Periodic Functions; Identities; Polar Coordinates and Complex Numbers; and Vectors. Students will advance their understanding of imaginary numbers through an investigation of complex numbers and polar coordinates. A strong understanding of complex and imaginary numbers is a necessity for fields such as engineering and computer programming. The eight Process Standards for Mathematics apply throughout the course. Together with the content standards, the Process Standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II and Geometry or Integrated Mathematics III
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

M2546 PROBABILITY AND STATISTICS
Probability and Statistics includes the concepts and skills needed to apply statistical techniques in the decision-making process. Probability and Statistics are made up of three strands: Data Analysis; Experimental Design; and Probability. Practical examples based on real experimental data are used throughout. Students plan and conduct experiments or surveys and analyze the resulting data. The use of graphing technology and computer programs is encouraged. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Integrated Mathematics III or Analytical Algebra II
- 1 semester course, 1 credit per semester
- Fulfills a Mathematics course requirement for all diplomas

M2550 QUANTITATIVE REASONING
Quantitative Reasoning is a mathematics course focused on the study of numeracy, ratio and proportional reasoning, modeling, probabilistic reasoning to assess risk, and statistics. Students build knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem solving, decision making, and economic productivity in real-world applications and prepare for an increasingly information-based society in which the ability to use and critically evaluate information, especially numerical information, is essential. Technology, such as computers and graphing calculators, should be used frequently. This higher-level mathematics course is designed to align with college-level quantitative reasoning courses for dual secondary/college credit. 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: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Algebra II or Integrated Mathematics III or Analytical Algebra II
- 1 or 2 semester course, 1 credit per semester. Due to the level of rigor, it is recommended that this course be offered as a 2 semester, 2 credit course.
- Fulfills a Mathematics course requirement for all diplomas
COURSES OFFERED:

- Basic Skills Development (G0500)
- Career Information and Exploration (G0522)
- College-Entrance Preparation (G0532)
- Humanities (G0514)
- Junior Reserve Officer Training Corps (G0516)
- Jobs for America's Graduates (JAG) (C0509)
- Introduction to Elevate (G0590)
- Elevator (G0590)
- Elevate Beyond (G0590)

**G0500 BASIC SKILLS DEVELOPMENT**
Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, which are essential for high school course work achievement. Determination of the skills to be emphasized in this course is based on Indiana's standards, individual school corporation general curriculum plans, and the student's Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester up to 8 semesters, 8 credits maximum
- Counts as an elective for all diplomas

**G0522 CAREER INFORMATION AND EXPLORATION**
Career Information and Exploration provides students with opportunities to learn about themselves and about various traditional and nontraditional occupations and careers. 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) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through opportunities such as field trips, internships, mock interviews, and guest speakers. Resume development experience and career-related testing are also provided to students.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: Preparing for College and Careers
- Credits: 1 semester course, 1 credit per semester. Max 8 credits
- Counts as a directed elective or elective for all diplomas
- The nature of this course allows for successive semesters of instruction provided progressively advanced proficiencies and content standards are utilized.

**G0532 COLLEGE-ENTRANCE PREPARATION**
College-Entrance Preparation utilizes individual student score reports from the PSAT or other formative assessments to prepare students for college readiness assessments such as Indiana's Graduation Qualifying Exam, the SAT. Based on individual student score reports, students should receive targeted instruction to strengthen their foundations in critical reading, writing, and mathematics. Being “college ready” means being prepared for any post-secondary education or training experience, including readiness for study at two-year and four-year institutions leading to a post-secondary credential (i.e., a certificate, license, Associate's or bachelor's degree). A college-ready student has the necessary English and mathematics skills to qualify for and succeed in entry-level, credit-bearing college courses without the need for remedial coursework.

- Recommended Grade: Grade 11
- Required Prerequisites: English 9 and English 10 (or their equivalent), Algebra I and Geometry or Integrated Mathematics I and Integrated Mathematics II
- Recommended Prerequisites: Algebra II or Analytical Algebra II (or concurrent enrollment in Algebra II)
- Credits: 1 semester course, 1 credit per semester, 4 credits maximum
- Counts as an elective credit for all diplomas.
- The nature of this course allows for successive semesters of instruction provided progressively advanced proficiencies and content standards are utilized.

**G0514 HUMANITIES**
A course in humanities provides for the study of content drawn from history, philosophy, literature, languages, and the arts. This course also includes an in-depth study of specific disciplines in these and related subject areas that could include: (1) linguistics; (2) archeology; (3)
jurisprudence; (4) the history, theory, and criticism of the arts; (5) the history and philosophy of science; (6) ethics; (7) comparative religions; and (8) other aspects of the social sciences which relate to understanding life and the world. The emphasis of the course work is on developing an understanding of the content of the course and how to actually apply it to the human environment. Particular attention is given to the relevance of these applications in regard to the current conditions of life.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester up to 2 credits
- Counts as a directed elective or elective for all diplomas
- This course may qualify for Academic Honors Diploma credit if it meets the standards for specific language arts, social studies, or fine arts courses and is taught by teachers licensed in the specific subject areas

**G0516 JUNIOR RESERVE OFFICER TRAINING CORPS**

This course is designed to develop: (1) citizenship and patriotism, (2) self-discipline, (3) physical fitness, (4) reliance and leadership, and (5) the skills used in decision making, communications, and problem-solving. The course content and experiences enable the students to understand the role of the military in support of national objectives and to become familiar with basic military knowledge, gender equity issues, benefits, and requirements. Topics to be included in the course are: (1) military history, (2) ROTC in the military, (3) substance abuse, (4) map reading, (5) marksmanship and firearm safety, (6) military drill, (7) field activities, (8) reserve components, and (9) first aid and hygiene. Opportunities are provided to explore the qualities and traits of courage, self-sacrifice, and integrity. Junior Reserve Officer Training Corps programs must be approved by and meet the requirements of the appropriate military organization.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, up to 8 semesters, 8 credits maximum
- Counts as an elective for all diplomas

**C0509 JOBS FOR AMERICA'S GRADUATES**

Jobs for America’s Graduates (JAG) is a state-based, national non-profit organization dedicated to preventing dropouts among young people who are most at-risk. JAG’s mission is to keep young people in school through graduation and provide work-based learning experiences that will lead to career advancement opportunities or to enroll in a postsecondary institution that leads to a rewarding career. JAG students receive adult mentoring while in school and one year of follow-up counseling after graduation. The JAG program is funded through grants provided by the Indiana Department of Workforce Development.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credits per semester, 4 credits maximum
- Counts as an elective for all diplomas

**G0590 INTRODUCTION TO ELEVATE**

By taking part in the Introduction to Elevate class, students learn to elevate themselves, their peers, their families, and their communities through the lens of the “7 parts of a whole person” and Elevate’s “13 character qualities and life skills”. Importantly, the course is based on each student’s perception of their own life and involves a paradigm shift in their understanding of their place in the world. Such a shift is possible when students learn about their passions and how to translate those passions into action to create positive change in their world. To prepare for such an audacious adventure, students have a chance to discover the wisdom of their past, the power of their present and the avenues to create a bold future.

- Course is only offered at Arsenal Technical and George Washington high schools
- Recommended Grade Level: 9
- Counts as an elective for all diplomas

**G0590 ELEVATER**

High school students are guided through their own personal leadership development within the context of 7 character qualities and 6 life skills. In addition, students are fitted with essential teaching, mentoring and leadership skills to become Elevate mentors (called Elevaters) who deliver lessons of leadership and character to elementary-age students. The course provides a balance of class work relating to the development and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, (5) leadership and mentoring skills, (6) character and life skills and (7) teaching strategies. By taking part in this course, students are empowered to be leaders in their own lives and agents of positive social change in the lives of others by building long-term life-changing relationships with adults, their peers and younger students.
Elevate Beyond is a highly engaging and interactive experience where students will uncover their personal passions and create paths to pursue those passions through the utilization of 7 character qualities and 6 life skills. Along the way, you will work with Elevate Teacher-Mentors who help you prepare for and carry out your post-high school plan, whether it involves university, community college, trade-school, the military, the workplace or entrepreneurship. In addition, Elevate Beyond students will design and deliver a service project to benefit the community, which integrates their identified passions, skills and high school plan. Topics to be explored include life-planning, the discovery of colleges and programs of study, career paths, post-secondary admission processes, ACT/SAT/placement testing, financial aid/scholarships, presentation and interview skills, personal financial literacy, resumes and personal statements, job searches, study skills, academic habits, and relationship-based decision-making.
COURSES OFFERED:

- Advanced Science, Special Topics (L) (X3092)
- Anatomy and Physiology (X5276)
- Biology I (L) (X3024)
- Biology II (L) (X3026)
- Chemistry I (L) (X3064)
- Earth and Space Science (L) (X3044)
- Environmental Science (L) (X3010)
- Integrated Chemistry-Physics (L) (X3108)
- Physics I (L) (X3084)
- Science Research, Independent Study (L) (X3008)
- Science Tutorial (X3094)
- Human Body Systems (C5216)

X3092 ADVANCED SCIENCE, SPECIAL TOPICS (L)
Advanced Science, Special Topics is any science course that is grounded in extended laboratory, field, and literature investigations in one or more specialized science disciplines, such as anatomy/physiology, astronomy, biochemistry, botany, ecology, electromagnetism, genetics, geology, nuclear physics, organic chemistry, etc. Students enrolled in this course engage in an in-depth study of the application of science concepts, principles, and unifying themes that are unique to that particular science discipline and that address specific technological, environmental or health-related issues. Under the direction of a science advisor, students enrolled in this course will complete an end-of-course project and presentation, such as a scientific research paper or science fair project, integrating knowledge, skills, and concepts from the student’s course of study. Individual projects are preferred, but group projects may be appropriate if each student in the group has specific and unique responsibilities.
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, may be offered for successive semesters
- Fulfills a science requirement for all diplomas

X5276 ANATOMY AND PHYSIOLOGY
Anatomy & Physiology is a course in which students investigate concepts related to Health Science, with emphasis on interdependence of systems and contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integumentary, skeletal, muscular, and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with Human Anatomy & Physiology. Students will understand the structure, organization and function of the various components of the healthy body in order to apply this knowledge in all health-related fields.
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Biology
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas

X3024 BIOLOGY I (L)
Biology I is a course based on the following core topics: cellular structure and function, matter cycles and energy transfer; interdependence; inheritance and variation in traits; evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by the Science and Engineering Practices (SEPS) and crosscutting concepts.
- Recommended Grade: 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Fulfills the Biology requirement for all diplomas

X3026 BIOLOGY II (L)
Biology II is an advanced laboratory, field, and literature investigations-based course. Students enrolled in Biology II examine in greater depth the structures, functions, and processes of living organisms. Students also analyze and describe the relationship of Earth's living organisms to each other and to the environment in which they live. In this course, students refine their scientific inquiry skills as they collaboratively and independently apply their knowledge of the unifying themes of biology to biological questions and problems related to personal and
community issues in the life sciences.

- **Recommended Grade:** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Biology I
- **Credits:** 2 semester course, 1 credit per semester
- **Counts as an Elective for all diplomas**
- **Fulfills a science course requirement for all diplomas**

**X3064 CHEMISTRY I (L)**
Chemistry I is a course based on the following core topics: properties and states of matter; atomic structure and the Periodic Table; bonding and molecular structure; reactions and stoichiometry; behavior of gases; thermochemistry; solutions; acids and bases. Students enrolled in Chemistry I compare, contrast, and synthesize useful models of the structure and properties of matter and the mechanisms of its interactions. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- **Recommended Grade:** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Algebra II (can be taken concurrently)
- **Credits:** 2 semester course, 1 credit per semester
- **Fulfills a science (physical) course requirement for all diplomas**
- **Qualifies as a quantitative reasoning course**

**X3044 EARTH AND SPACE SCIENCE (L)**
Earth and Space Science I is a course focused on the following core topics: universe; solar system; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth’s interconnected systems and examine how earth’s materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 1 credit per semester
- **Counts as an elective for all diplomas**
- **Fulfills a science course requirement for all diplomas**

**X3010 ENVIRONMENTAL SCIENCE (L)**
Environmental Science is an interdisciplinary course that integrates biology, earth science, chemistry, and other disciplines. Students completing Environmental Science, acquire the essential tools for understanding the complexities of national and global environmental systems. Students enrolled in this course conduct in-depth scientific studies of environmental systems, flow of matter and energy, natural disasters, environmental policies, biodiversity, population, pollution, and natural and anthropogenic resource cycles. Cross-cutting concepts are an integral part of this course. Students formulate, design, and carry out laboratory and field investigations as an essential course component using the Science and Engineering Practices.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Two credits science coursework
- **Credits:** 2 semester course, 1 credit per semester
- **Counts as an elective for all diplomas**
- **Fulfills a science (life) course requirement for all diplomas**

**X3108 INTEGRATED CHEMISTRY-PHYSICS (L)**
Integrated Chemistry-Physics is a course focused on the following core topics: constant velocity; uniform acceleration; Newton’s Laws of motion (one dimension); energy; particle theory of matter; describing substances; representing chemical change; electricity and magnetism; waves; nuclear energy. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation using the Science and Engineering Practices (SEPS) and cross-cutting concepts.

- **Recommended Grade:** 9
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Algebra I (may be taken concurrently with this course)
- **Credits:** 2 semester course, 1 credit per semester
X3084 PHYSICS I (L)
Physics I is a course focused on the following core topics: constant velocity; constant acceleration; forces; energy; linear momentum in one dimension; simple harmonic oscillating systems; mechanical waves and sound; simple circuit analysis. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation using the Science and Engineering Practices (SEPS) and cross-cutting concepts.
- Recommended Grade: 9, 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Algebra I or Algebra II
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a science (physical) course requirement for all diplomas
- Qualifies as a Quantitative Reasoning course

X3008 SCIENCE RESEARCH, INDEPENDENT STUDY (L)
Science Research, Independent Study is a course that provides students with unique opportunities for independent, in-depth study of one or more specific scientific problems. Students develop a familiarity with the laboratory procedures used in a given educational, research, or industrial setting or a variety of such settings. Students enrolled in this course will complete a science fair project to be exhibited at a regional science fair and/or state science symposium, an end-of-course project, such as a scientific research paper, or some other suitable presentation of their findings.
- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Two credits in Core 40 science coursework (this course may be taken concurrently with a Core 40 science course)
- Credits: 2 semester course, 1 credit per semester
- Counts as a science course for all diplomas

X3094 SCIENCE TUTORIAL
Science Tutorial provides students with individualized instruction designed to support success in completing Core 40 science coursework for each year that they are enrolled in Core 40 science courses.
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: This course must be taken concurrently with a Core 40 science course
- Credits: 1 semester course, 1 credit per semester, 8 credits maximum
- Counts as an elective for all diplomas

C5216 HUMAN BODY SYSTEMS
Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.
- Recommended Grade(s): 10
- Required Prerequisites: Principles of Biomedical Sciences
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diplomas
SOCIAL STUDIES

COURSES OFFERED:

- Citizenship and Civics (S1508)
- Current Problems, Issues, and Events (S1512)
- Economics (S1514)
- Geography and History of the World (S1570)
- Indiana Studies (S1518)
- International Relations (S1520)
- Law Education (S1526)
- Political Science (S1530)
- Psychology (S1532)
- Ethnic Studies (S1516)
- Sociology (S1534)
- Topics in History (S1538)
- Topics in Social Science (S1550)
- United States Government (S1540)
- United States History (S1542)
- Urban Affairs (S1544)
- World History and Civilization (S1548)

S1508 CITIZENSHIP AND CIVICS
Citizenship and Civics is an overview of citizenship roles and responsibilities designed to help students become independent thinkers and conscientious citizens. This course deals with political trends and behavior which citizens consider to be relevant to the most pressing issues of the day. The course provides students with experiences that will develop attitudes of citizenship within a democratic society. Topics include: (1) the policymaking process, (2) public participation in policymaking, (3) citizenship rights and responsibilities in a changing society, and (4) the relationship between modern society and government. Study of the local government should be a component of this course.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills social studies requirement for General Diploma.

S1512 CURRENT PROBLEMS, ISSUES, AND EVENTS
Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. Course may be repeated for credit if the content of the course changes.
- Counts as an elective for all diplomas
- Fulfills social studies requirement for General Diploma.

S1514 ECONOMICS
Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course analyzes economic reasoning and behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills the Economics requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Fulfills a Social Studies requirement for the General Diploma only
- Qualifies as a quantitative reasoning course
S1570 GEOGRAPHY AND HISTORY OF THE WORLD

Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to deepen their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety of primary and secondary sources, organizing information by creating graphic representations, analyzing information to determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. The historical geography concepts used to explore global themes include change over time, origin, diffusion, physical systems, cultural landscapes, and spatial distribution/patterns and interaction/relationships. Students use the knowledge, tools, and skills obtained from this course in order to analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive and responsible citizenship, to encourage and support the development of critical thinking skills and lifelong learning, and to help prepare Indiana students for the 21st Century.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a Social Studies requirement for the General Diploma
- Counts as an elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for the Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

S1518 INDIANA STUDIES

Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included, and students will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma
- Must be offered at least once per school year

S1520 INTERNATIONAL RELATIONS

International Relations provides a survey of the formal relations among sovereign states in the international system, emphasizing the operation of diplomacy. The procedures for settlement of disputes and various methods of international conflict resolution are included. This course examines power, interdependence, global development, and international organizations.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

S1526 LAW EDUCATION

Law Education provides an understanding of the American legal system and its basis in the United States Constitution. The course is designed to promote an understanding of society and its system of laws by indicating how citizens may effectively function within the law. Ways of dealing with interpersonal conflict in order to secure constructive change are included, along with the development of critical thinking and problem solving skills. Case studies, field trips, simulations, and mock trials will be used in this course whenever feasible.

- Recommended Grade: 11,12
- Required Prerequisites: none
- Recommended Prerequisites: United States Government or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
S1530 POLITICAL SCIENCE
Political Science provides for a study of the processes and goals of politics; processes of government; methods by which decisions are made; and the basis of decision making. The course goes beyond the study of governmental structure and functions to include and analysis of topics such as: (1) the nature of the American party system, (2) interest groups, (3) public opinion, (4) laws which affect students, (5) reasons laws are changed, (6) due process of law, (7) legal rights, and (8) legal responsibilities. Comparative studies of governmental systems in nations other than the United States may also be included.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: United States Government or teacher recommendation
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

S1532 PSYCHOLOGY
Psychology is the scientific study of mental processes and behavior. The course is divided into eight content areas: History and Scientific Method, Biological Basis for Behavior, Development, Cognition, Personality and Assessment, Abnormal Psychology, Socio-Cultural Dimensions of Behavior, and Psychological Thinking. History and Scientific Method explores the history of psychology, the research methods used, and the ethical considerations that must be utilized. Biological Basis for Behavior focuses on the way the brain and nervous system function, including sensation, perception, motivation and emotion. Development analyzes the changes through one's life including the physical, cognitive, emotional, social and moral development. Cognition focuses on learning, memory, information processing, and language development. Personality and Assessment explains the approaches used to explain one's personality and the assessment tools used. Abnormal Psychology explores psychological disorders and the various treatments used for them. Socio-Cultural Dimensions of Behavior covers topics such as conformity, obedience, perceptions, attitudes and influence of the group on the individual. Psychological Thinking explores how to think like a psychologist and expand critical thinking skills needed in the day-to-day life of a psychologist.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

S1516 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, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit
- Counts as an elective for all diplomas
- Must be offered at least once per school year

S1534 SOCIOLOGY
Sociology allows students to study human social behavior from a group perspective. The sociological perspective is a method of studying recurring patterns in people's attitudes and actions and how these patterns vary across time, cultures, and in social settings and groups. Students describe the development of sociology as a social science and identify methods of research. Through research methods such as scientific inquiry studies examine society, group behavior, and social structures. The influence of culture on group behavior is addressed through institutions such as the family, religion, education, economics, community organizations, government, and political and social groups. The impact of social groups and institutions on group and individual behavior and the changing nature of society will be examined. Influences on group behavior and social problems are included in the course. Students also analyze the role of individuals in the community and social problems in today's world.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
S1538 TOPICS IN HISTORY
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: 11, 12 •Required Prerequisites: none •Recommended Prerequisites: United States History or World History and Civilization •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. •Counts as an elective for all diplomas •Fulfills course requirement for General Diploma

S1550 TOPICS IN SOCIAL SCIENCES
Topics in Social Science provides students with an opportunity for in-depth study of a specific topic, theme, or concept in one of the social science disciplines such as anthropology, archaeology, economics, geography, political science, psychology, or sociology. It is also possible to focus the course on more than one discipline. A subtitle should be included to give a clear idea of the course content. For example, a course focusing on a specific in political science might be entitled, “Topics in Social Science: Comparative Government.” Courses taught under this title should emphasize scientific methods of inquiry and help students develop effective research and thinking skills.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

S1540 UNITED STATES GOVERNMENT
United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments and understand the rights and responsibilities of citizens and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. Analysis of how the United States interacts with other nations and the government’s role in world affairs is included in this course. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will be able to explain the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Fulfills Government requirement for all diplomas
- Students are required to take the naturalization test for citizenship per SEA 132 (New 2019-2020).
- SEA 398 (Spring 2020) states that schools will be required to issue the naturalization test, report results, and post test data results starting in November 2022.

S1542 UNITED STATES HISTORY
United States History is a two semester course that builds upon concepts developed in previous studies of U.S. History and emphasizes national development from the late nineteenth century into the twenty-first century. After reviewing fundamental themes in the early development of the nation, students are expected to identify and review significant events, persons, and movements in the early development of the nation. The course then gives major emphasis to the interaction of key events, people, and political, economic, social, and cultural influences in national developments from the late nineteenth century through the present as they relate to life in Indiana and the United States. Students are expected to trace and analyze chronological periods and examine the significant themes and concepts in U.S. History. Students develop historical thinking and research skills and use primary and secondary sources to explore topical issues and to understand the cause for changes in the nation over time.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
Fulfills the US History requirement for all diplomas

S1544 URBAN AFFAIRS
Urban Affairs examines the history, organization, processes, and distinctive aspects of urban affairs. The rise of modern cities and an analysis of modern urban problems are dealt with in this course. The politics of governing urban areas, including the selection of political leaders and citizen participation in the decision-making process, is to be emphasized. Data collection and research skills may be taught in conjunction with the study of this course.
- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills course requirement for General Diploma

S1548 WORLD HISTORY AND CIVILIZATION
World History and Civilization emphasizes events and developments in the past that greatly affected large numbers of people across broad areas and that significantly influenced peoples and places in subsequent eras. Key events related to people and places as well as transcultural interaction and exchanges are examined in this course. Students are expected to compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will examine examples of continuity and change, universality and particularity, and unity and diversity among various peoples and cultures from the past to the present. Students are also expected to practice and process skills of historical thinking and research and apply content knowledge to the practice of thinking and inquiry skills and processes. There will be continuous and pervasive interactions of processes and content, skills and substance, in the teaching and learning of history.
- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills the Geography History of the World/World History and Civilization graduation requirement for all diplomas
WORLD LANGUAGES

COURSES OFFERED:

- American Sign Language I (W2156)
- Chinese I (W2000)
- Chinese II (W2002)
- Chinese III (W2004)
- Chinese IV (W2006)
- English as a New Language (L2188)
- French I (W2020)
- French II (W2022)
- French III (W2024)
- French IV (W2026)
- German I (W2040)
- German II (W2042)
- German III (W2044)
- German IV (W2046)
- Japanese I (W2060)
- Japanese II (W2062)
- Japanese III (W2064)
- Japanese IV (W2066)
- Latin I (W2080)
- Latin II (W2082)
- Latin III (W2084)
- Language for Heritage Speakers I (W2190)
- Language for Heritage Speakers II (W2192)
- Language for Heritage Speakers III (W2194)
- Russian I (W2100)
- Russian II (W2102)
- Russian III (W2104)
- Spanish I (W2120)
- Spanish II (W2122)
- Spanish III (W2124)
- Spanish IV (W2126)

W2156 AMERICAN SIGN LANGUAGE I
American Sign Language I is a course that introduces students to American Sign Language (ASL) and the deaf community. The course focuses on frequently used signs through a functional-notional approach, and discusses cultural features of the deaf community. Emphasis is placed on development of receptive and expressive language skills. Through this course, students are given the opportunity to develop visual acuity; follow brief verbal instructions; understand short statements, questions, and dialogues; develop short descriptions with guidance; begin to understand the current GLOSSING system used to write ASL; and examine other methods developed to write ASL, including Sign Writing. Students also learn to recognize the difference between the pathological and psychological definitions of deafness, recognize the widespread use of ASL throughout the United States, and develop an understanding of the relationship between languages and cultures as a whole.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2000 CHINESE I
Chinese I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning Chinese language learning, and to various aspects of Chinese-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write simple sentences using characters. This course also emphasizes the development of reading and listening comprehension skills, such as recognizing characters and sounds of familiar words and comprehending brief oral directions. Additionally, students will examine the practices, products and perspectives of Chinese-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Chinese language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2002 CHINESE II
Chinese II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Chinese language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal
W2004 CHINESE III

Chinese III, a course based on Indiana's Academic Standards for World Languages, builds upon effective strategies for Chinese language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write simple paragraphs using characters. This course also emphasizes the continued development of reading and listening comprehension skills, such as using radicals, stroke order, and stroke count to guess meaning. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation. Additionally, students will continue to develop understanding of Chinese-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Chinese language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Chinese I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2006 CHINESE IV

Chinese IV, a course based on Indiana's Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of Chinese-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Chinese language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Chinese speakers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: Chinese I, II and III
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

L2188 ENGLISH AS A NEW LANGUAGE

English as a New Language, an integrated English course based on the WIDA English Language Development (ELD) Standards, is the study of language, literature, composition and oral communication for English learners (ELs) so that they improve their proficiency in listening, speaking, reading, writing and comprehension of standard English. Students study English vocabulary used in fictional texts and content-area texts, speak and write English so that they can function within the regular school setting and an English-speaking society, and deliver oral
presentations appropriate to their respective levels of English proficiency.

- **Recommended Grade**: Recommended Grade Level: 9, 10, 11, and 12. The intent of the ENL course is to move students as successfully, smoothly, and rapidly as possible into the Core 40 English courses offered in grades 9-12.
- **Required Prerequisites**: none
- **Recommended Prerequisites**: English proficiency placement test results
- **Credit**: World Language credit (2188): If ENL course work addresses Indiana’s Academic Standards for World Languages and is taken concurrently with another English/Language Arts course, up to 8 credits accrued may count as World Language credits for all diplomas.
- **English/Language Arts credit (1012)**: If ENL course work addresses Indiana’s Academic Standards for English/Language Arts and is based on general ELA curriculum and student’s Individualized Learning Plan, up to 8 credits accrued can be counted as the required English/Language Arts credits for all diplomas.

### W2020 FRENCH I

French I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning French language learning, and to various aspects of French-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of French-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding French language and culture outside of the classroom.

- **Recommended Grade**: 9, 10, 11, 12
- **Required Prerequisites**: none
- **Recommended Prerequisites**: none
- **Credits**: 2 semester course, 1 credit per semester
- **Counts as a directed elective or elective for all diplomas
- **Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma**

### W2022 FRENCH II

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

- **Recommended Grade**: 9, 10, 11, 12
- **Required Prerequisites**: French I
- **Recommended Prerequisites**: none
- **Credits**: 2 semester course, 1 credit per semester
- **Counts as a directed elective or elective for all diplomas
- **Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma**

### W2024 FRENCH III

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: French I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2026 FRENCH IV

French IV, a course based on Indiana’s Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of French-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the French language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native French speakers.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: French I, II and III
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2040 GERMAN I

German I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning German language learning, and to various aspects of German-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of German-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding German language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2042 GERMAN II

German II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for German language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of German-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding German language and culture outside of the classroom.
W2044 GERMAN III

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: German I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2046 GERMAN IV

German IV, a course based on Indiana's Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of German-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the German language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native German speakers.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: German I, II and III
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2060 JAPANESE I

Japanese I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning Japanese language learning, and to various aspects of Japanese-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write simple sentences using characters. This course also emphasizes the development of reading and listening comprehension skills, such as recognizing letters and sounds of familiar words and comprehending brief oral directions. Additionally, students will examine the practices, products and perspectives of Japanese-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Japanese language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
W2062 JAPANESE II
Japanese II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Japanese language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write sentences and descriptions using characters. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and recognizing words and characters through stroke order and stroke count. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation. Additionally, students will describe the practices, products and perspectives of Japanese-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Japanese language and culture outside of the classroom.

Recommended Grade: 9, 10, 11, 12
Required Prerequisites: Japanese I
Recommended Prerequisites: none
Credits: 2 semester course, 1 credit per semester
Counts as a directed elective or elective for all diplomas
Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2064 JAPANESE III
Japanese III, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Japanese language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write simple paragraphs using characters. This course also emphasizes the continued development of reading and listening comprehension skills, such as using radicals, stroke order, and stroke count to guess meaning. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation. Additionally, students will continue to develop understanding of Japanese-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Japanese language and culture outside of the classroom.

Recommended Grade: 9, 10, 11, 12
Required Prerequisites: Japanese I and II
Recommended Prerequisites: none
Credits: 2 semester course, 1 credit per semester
Counts as a directed elective or elective for all diplomas
Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2066 JAPANESE IV
Japanese IV, a course based on Indiana’s Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of Japanese-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Japanese language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Japanese speakers.

Recommended Grade: 10, 11, 12
Required Prerequisites: Japanese I, II and III
Recommended Prerequisites: none
Credits: 2 semester course, 1 credit per semester
W2080 LATIN I
Latin I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning Latin language learning, and to various aspects of classical Roman culture. This course emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Though interpersonal communication is not an explicit emphasis of this course, opportunities may be provided for students to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. Additionally, students will examine the practices, products and perspectives of classical Roman culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Latin language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2082 LATIN II
Latin II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Latin language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Though interpersonal communication is not an explicit emphasis of this course, opportunities may be provided for students to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. Additionally, students will describe the practices, products and perspectives of classical Roman culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Latin language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Latin I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2084 LATIN III
Latin III, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Latin language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending details written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Though interpersonal communication is not an explicit emphasis of this course, opportunities may be provided for students to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. Additionally, students will continue to develop understanding of classical Roman culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Latin language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Latin I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma
W2190 LANGUAGE FOR HERITAGE SPEAKERS I
Language for Heritage Speakers I is a course designed for heritage speakers of world languages who have demonstrated some degree of oral proficiency. The purpose of this course is to enable Heritage Language Learners to increase proficiency and bi-literacy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the United States today. Placement of students and development of the course curriculum is dependent upon the population of students enrolled in this course.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none, or placement as determined at local level
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2192 LANGUAGE FOR HERITAGE SPEAKERS II
Language for Heritage Speakers II builds upon Language for Heritage Speakers I, and is a course designed for heritage speakers of world languages who have demonstrated some degree of oral proficiency. The purpose of this course is to enable Heritage Language Learners to increase proficiency and bi-literacy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the United States today. Placement of students and development of the course curriculum is dependent upon the population of students enrolled in this course.

- Recommended Grade: 9, 10, 11, 12
- Prerequisites: none
- Recommended Prerequisites: Language for Heritage Language Learners I, or placement as determined at local level
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2194 LANGUAGE FOR HERITAGE SPEAKERS III
Language for Heritage Speakers III builds upon Language for Heritage Speakers II, and is a course designed for heritage speakers of world languages who have demonstrated some degree of oral proficiency. The purpose of this course is to enable Heritage Language Learners to increase proficiency and bi-literacy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the United States today. Placement of students and development of the course curriculum is dependent upon the population of students enrolled in this course.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Language for Heritage Language Learners II, or placement as determined at local level
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2100 RUSSIAN I
Russian I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning Russian language learning, and to various aspects of Russian-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Russian-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Russian language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
W2102 RUSSIAN II
Russian II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Russian language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Russian-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Russian language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Russian I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2104 RUSSIAN III
Russian III, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Russian language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of Russianspeaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Russian language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Russian I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2120 SPANISH I
Spanish I, a course based on Indiana’s Academic Standards for World Languages, introduces students to effective strategies for beginning Spanish language learning, and to various aspects of Spanish-speaking culture. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to basic requests and questions, understand and use appropriate greetings and forms of address, participate in brief guided conversations on familiar topics, and write short passages with guidance. This course also emphasizes the development of reading and listening comprehension skills, such as reading isolated words and phrases in a situational context and comprehending brief written or oral directions. Additionally, students will examine the practices, products and perspectives of Spanish-speaking culture; recognize basic routine practices of the target culture; and recognize and use situation-appropriate non-verbal communication. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
W2122 SPANISH II
Spanish II, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by encouraging the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to make and respond to requests and questions in expanded contexts, participate independently in brief conversations on familiar topics, and write cohesive passages with greater independence and using appropriate formats. This course also emphasizes the development of reading and listening comprehension skills, such as using contextual clues to guess meaning and comprehending longer written or oral directions. Students will address the presentational mode by presenting prepared material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will describe the practices, products and perspectives of Spanish-speaking culture; report on basic family and social practices of the target culture; and describe contributions from the target culture. This course further emphasizes making connections across content areas and the application of understanding Spanish language and culture outside of the classroom.
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Spanish I
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2124 SPANISH III
Spanish III, a course based on Indiana’s Academic Standards for World Languages, builds upon effective strategies for Spanish language learning by facilitating the use of the language and cultural understanding for self-directed purposes. This course encourages interpersonal communication through speaking and writing, providing opportunities to initiate, sustain and close conversations; exchange detailed information in oral and written form; and write cohesive information with greater detail. This course also emphasizes the continued development of reading and listening comprehension skills, such as using cognates, synonyms and antonyms to derive meaning from written and oral information, as well as comprehending detailed written or oral directions. Students will address the presentational mode by presenting student-created material on a variety of topics, as well as reading aloud to practice appropriate pronunciation and intonation. Additionally, students will continue to develop understanding of Spanish-speaking culture through recognition of the interrelations among the practices, products and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas as well the application of understanding Spanish language and culture outside of the classroom.
- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: Spanish I and II
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma

W2126 SPANISH IV
Spanish IV, a course based on Indiana’s Academic Standards for World Languages, provides a context for integration of the continued development of language skills and cultural understanding with other content areas and the community beyond the classroom. The skill sets that apply to the exchange of written and oral information are expanded through emphasis on practicing speaking and listening strategies that facilitate communication, such as the use of circumlocution, guessing meaning in familiar and unfamiliar contexts, and using elements of word formation to expand vocabulary and derive meaning. Additionally, students will continue to develop understanding of Spanish-speaking culture through explaining factors that influence the practices, products, and perspectives of the target culture; reflecting on cultural practices of the target culture; and comparing systems of the target culture and the student’s own culture. This course further emphasizes making connections across content areas through the design of activities and materials that integrate the target language and culture with concepts and skills from other content areas. The use and influence of the Spanish language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native Spanish speakers.
- Recommended Grade: 10, 11, 12
- Required Prerequisites: Spanish I, II, and III
- Recommended Prerequisites: none
- Credits: 2 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a World Language requirement for the Core 40 with Academic Honors Diploma
CAREER AND TECHNICAL EDUCATION (CTE) PATHWAY COURSES BY HIGH SCHOOL & ACADEMY
CTE SCHEDULING GUIDANCE FOR SCHOOL COUNSELORS

Please refer to the chart below or the Pathways Progression Chart when scheduling students into Future Ready Pathway courses:

<table>
<thead>
<tr>
<th>Cohort</th>
<th>If….</th>
<th>Then…..</th>
</tr>
</thead>
<tbody>
<tr>
<td>2027</td>
<td>…the student will be a freshman in 2023-24</td>
<td>…they should enroll in Foundational Courses (i.e. PCC) and learn about the NLPS, EC, and/or IB pathway options available at their high school of choice.</td>
</tr>
<tr>
<td>2026</td>
<td>… the student will be a sophomore (in most cases)* in 2023-24</td>
<td>…they should enroll in the new NLPS courses for their CTE pathway, starting with the NLPS Principles course.</td>
</tr>
<tr>
<td>2025</td>
<td>…the student will be a junior in 2023-24 and is currently enrolled in NLPS courses..</td>
<td>…they should continue with their NLPS concentrator course(s) in 2023-24.</td>
</tr>
<tr>
<td>2024</td>
<td>...the student will be a senior in 2023-24 and the student is enrolled in a non-NLPS pathway… ....the student will be a senior in 2023-24 and the student is NOT enrolled in a CTE pathway.</td>
<td>...they should continue in the non-NLPS course sequence for CTE pathways for 2023-24. ...they should consider another Bucket 3 option to meet the graduation pathway requirement in 2023-24.</td>
</tr>
</tbody>
</table>

*Refer to the course catalog pathway pages regarding scheduling for certain pathways, as there are some exceptions per cohort group.

Special Cases: For students transferring into the district and/or those with few to none CTE credits, or earned NLPS CTE credits, please reach out to the School Counseling Coordinator for special case determination.
IPS High Schools may offer the following foundational CTE courses for students as they wish, based on staffing and student needs. If a school would like to teach a course not listed below, please contact the Director of Academies and Pathways for assistance.

- **Advanced Child Development (C5360)**
- **Child Development (C5362)**
- **Digital Apps and Responsibilities (C4528)**
- **Interpersonal Relationships (C5364)**
- **Introduction to Business (B4518)**
- **Nutrition and Wellness (C5342)**
- **Personal Financial Responsibility (C4540)**
- **Preparing for College and Careers (C5394)**

### C5360 ADVANCED CHILD DEVELOPMENT
Advanced Child Development is for those students interested in life foundations, academic enrichment, and/or careers related to knowledge of children, child development, and nurturing of children. This course addresses issues of child development from ages four through age eight (grade three). It builds on the Child Development course, which is a prerequisite. Advanced Child Development includes the study of professional and ethical issues in child development; child growth and development; child development theories, research, and best practices; child health and wellness; teaching and guiding children; special conditions affecting children; and career exploration in child development and nurturing. A project-based approach that utilizes higher order thinking, communication, leadership, management, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** Child Development
- **Credits:** 1 or 2 semester course, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

### C5362 CHILD DEVELOPMENT
Child Development is an introductory course for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child caregiving and nurturing; and support systems for parents and caregivers. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of child development. Direct, concrete mathematics and language arts proficiencies will be applied. Authentic applications such as introductory laboratory/field experiences with young children and/or service learning that build knowledge of children, child development, and nurturing of children are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to children, child development, and nurturing of children.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 credit per semester, 1 credit maximum
- **Directed elective or elective for all diplomas**

### C4528 DIGITAL APPLICATIONS AND RESPONSIBILITY
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(s):** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 to 2 semester course, 1 credit per semester, 2 credits maximum
C5364 INTERPERSONAL RELATIONSHIPS
Interpersonal Relationships is an introductory course that is especially relevant for students interested in careers that involve interacting with people. It is also valuable for all students as a life foundation and academic enrichment. This course addresses knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course topics include communication skills; leadership, teamwork, and collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of interpersonal relationships. Direct, concrete language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides a foundation for continuing and post-secondary education for all career areas that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, and the general public.

- Recommended Grade(s): 10, 11
- Required Prerequisites: NONE
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Such a course may be differentiated from the regular course offering by using a subtitle in addition to Interpersonal Relationships. A student may earn credits for both versions of the course. No waiver is required in this instance. Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for the Health and Wellness waiver, a student must take three of the approved courses. For more information, see 511 IAC 6-7.1-4(c)(6).

B4518 INTRODUCTION TO BUSINESS
Introduction to Business introduces students to the world of business, including the concepts, functions, and skills required for meeting the challenges of operating a business in the twenty-first century on a local, national, and/or international scale. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments.

- Recommended Grade(s): 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C5342 NUTRITION AND WELLNESS
Nutrition and Wellness is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied. This course is the first in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

- Recommended Grade(s): 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester, 1 credit maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for the Health and Wellness waiver, a student must take three of the approved courses. For more information, see 511 IAC 6-7.1-4(c)(6).
C4540 PERSONAL FINANCIAL RESPONSIBILITY
Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision making; analyze personal standards, needs, wants, and goals; identify sources of income, savings, and investing; understand banking, budgeting, record-keeping and managing risk, insurance and credit card debt. A project based approach and applications through authentic settings such as work based observations and service learning experiences are appropriate. Direct, concrete applications of mathematics proficiencies in projects are encouraged.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester, 1 credit maximum
- Counts as a directed elective or elective for all diplomas Qualifies as a quantitative reasoning course

C5394 PREPARING FOR COLLEGE AND CAREERS (required for all entering Freshmen)
Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today’s choices on tomorrow's possibilities. Topics to be addressed include twenty first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals, examining multiple life roles and responsibilities as individuals and family members, planning and building employability skills, transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real world experiences, is recommended.

- Recommended Grade(s): 9
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Only 1 credit may count toward CTE Concentrator Status for Perkins IV Pathways
- Qualifies as one of the FACS courses a student can take to waive the Health & Wellness graduation requirement. To qualify for a waiver, a student must take three of the approved courses. For more information, please see 511 IAC 6-7.1-4(c)(6).
- Counts as a directed elective or elective for all diplomas
Fire and Rescue Pathway

**N7195 Principles of Fire and Rescue NLPS**
Principles of Fire and Rescue introduces students to the various roles that firefighters and emergency services workers play to protect the public from the loss of life and property. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions. This course will introduce students to the history, terminology, and basic firefighting skills needed for a beginning firefighter. Additionally students will develop a career plan for a career in public safety; including areas of Fire Science, Homeland Security, and Emergency Medical Services. Prior to enrollment in this pathway, students will need to complete a candidate interview with IPS and IFD personnel.

- **Recommended Grade(s):** 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7189 Fire Fighting Fundamentals NLPS**
Fire Fighting Fundamentals is for those students who are seeking certification as a firefighter. This course will prepare students for the Hazardous Materials Awareness and Operations certifications and will introduce students to NFPA 1001 which serves as the standard of measurement for all firefighters in North America. Students will learn the knowledge and hands-on practical skills for managing and controlling a hazardous materials incident required for the certifications. Furthermore, students will study how a fire behaves and will learn the basic firefighting skills needed to extinguish a fire while protecting themselves and other firefighters.

- **Recommended Grade(s):** 11
- **Required Prerequisites:** Principles of Fire and Rescue
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7186 Advanced Fire Fighting NLPS**
Advanced Fire Fighting expands upon the principles and techniques of firefighting learned in Fire Fighting Fundamentals. Students will study fire protection systems, firefighter safety and survival. Students will also learn what fire is, the chemical hazards of combustion, and related by-products of fire. Additionally, students will gain a better understanding of fire department organization, administration, operations, and basic strategies and tactics.

- **Recommended Grade(s):** 12
- **Required Prerequisites:** Principles of Fire and Rescue; Fire Fighting Fundamentals
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7156 Technical Skills Development**
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- **Recommended Grade(s):** 12
- **Required Prerequisites:** Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- **Counts as a directed elective or elective for all diplomas**
ARSENAL TECHNICAL HIGH SCHOOL

Media Arts Academy

Pathways Offered:
Digital Design | Radio & Television Broadcasting

DIGITAL DESIGN PATHWAY

N7140 PRINCIPLES OF DIGITAL DESIGN NLPS
Principles of Digital Design introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.
- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7141 DIGITAL DESIGN GRAPHICS NLPS
Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices.
- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Digital Design
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C5550 GRAPHIC DESIGN AND LAYOUT
Graphic Design and Layout teaches design process and the proper and creative use of type as a means to develop effective communications for global, corporate and social application. Students will create samples for a portfolio, which may include elements or comprehensive projects in logo, stationery, posters, newspaper, magazine, billboard, and interface design.
- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7136 PROFESSIONAL PHOTOGRAPHY & VIDEOGRAPHY NLPS
Professional Photography & Videography further develops advanced camera skills and photographic vision. The course introduces special techniques and digital processes while refining printing and processing skills. It will also emphasize good composition and the use of photography as a communication tool. Students will also learn the basics of planning, shooting, editing and post-producing video and sound.
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maxinum

N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a
work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study.

**N7246 DIGITAL DESIGN CAPSTONE NLPS**
The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

- Recommended Grade(s): 12
- Required Prerequisites: Digital Design Concentrator Sequence
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas

**C5572 GRAPHIC IMAGING TECHNOLOGY**
Graphic Imaging Technology will include organized learning experiences that focus on theory and laboratory activities in pre-press, press and finishing operations. Emphasis will be placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations, and finishing techniques. Instructional activities will enhance student’s language arts skills through the use of proofreading, spelling, and punctuation exercises. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Computer Illustration and Graphics
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**C5570 COMMERCIAL PHOTOGRAPHY**
Commercial Photography is an organized learning experience that includes theory, laboratory, and studio work as each relates to all phases of camera use, photographic processing, and electronic photographic editing. Instruction covers the topics of composition and color dynamics; contact printing and enlarging; developing film; lighting techniques and meters; large and medium format cameras and other current photographic equipment used for portrait, commercial, and industrial photography. Focus is placed on camera operation and composition related to traditional photographic principles and also tools and creative effects for editing and/or enhancing photographs. Instruction emphasizes the planning, development, and production of materials that visually communicate ideas and information.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Communications
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**C5974 WORK BASED LEARNING CAPSTONE (WBL)**
Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based
For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- **Recommended Grade:** 12
- **Required Prerequisites:** Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1-3 credits per semester, 6 credits maximum

### C4576 ARTS, AV TECH AND COMMUNICATIONS: SPECIAL TOPICS

Arts, AV Tech and Communication: Special Topics is an extended learning experience designed to address the advancement and specialization of careers within the career cluster through the provision of a specialized course for a specific workforce need in the school’s region. The learning experience is at a qualified site, and is designed to give the student the opportunity to learn and practice technical skills while working under the direction of the appropriately licensed professional. Throughout the course, students will focus on learning about employment opportunities and obtaining the knowledge, skills and attitudes essential for success in specific occupations. Course standards and curriculum must be tailored to the specific profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. Participation in a related CTSO encourages the development of leadership, communication and career related skills, and opportunities for community service.

- **Recommended Grade(s):** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, up to 3 credits per semester, May be offered for successive semesters up to 12 credits
- **Counts as a directed elective or elective for all diplomas**

### RADIO & TELEVISION BROADCASTING PATHWAY

#### N7139 PRINCIPLES OF BROADCASTING NLPS

The purpose of the Principles of Broadcasting course is to provide entry-level fundamental skills for students who wish to seek or pursue opportunities in the field of broadcasting or mass media. Students will explore the technical aspects of audio and sound design for radio production and distribution, as well as, the technical aspects of video production and distribution.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

#### N7306 AUDIO AND VIDEO PRODUCTION ESSENTIALS NLPS

Audio and Video Production Essentials provides an in-depth study on audio and video production techniques for radio, television, and digital technologies. Students will learn skills necessary for audio production and on-air work used in radio and other digital formats. Additionally, experience will be gained in the development of the video production process; including skills in message development, directing, camera, video switcher, and character generator operations.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** Principles of Broadcasting
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a Directed Elective or Elective for all diplomas**

#### N7307 MASS MEDIA PRODUCTION NLPS

Mass Media Production will focus on the study of theory and practice in the voice and visual aspects of radio and television performance. In addition, this course introduces the skills used to acquire and deliver news stories in a digital media format. Students will learn how to research issues and events, interview news sources, interact with law enforcement and government officials, along with learning to write in a comprehensive news style.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Principles of Broadcasting; Audio and Video Production Essentials
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a Directed Elective or Elective for all diplomas**
N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study.

N7308 RADIO & TV BROADCASTING CAPSTONE NLPS
This course will cover a variety of domains further building on skills in video production, and broadcast industry practices specific to radio, television, and digital media. Attention will be given to cross-industry synergies, emerging technologies, and the global market for media. Students are highly encouraged to do a video newscast or radio practicum to gain real world experience. In most cases this practicum may be completed through a school-based enterprise.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Broadcasting; Audio and Video Production Essentials; Mass Media Production
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
ARSENAL TECHNICAL HIGH SCHOOL

Skilled Trades and Human Services Academy

Pathways Offered:

Automotive Services | Construction Trades | Welding

Culinary Arts | Cosmetology

AUTOMOTIVE SERVICES PATHWAY

**N7213 PRINCIPLES OF AUTOMOTIVE SERVICES NLPS** *(for students in Principles of Automotive Services SY 22-23; must enroll concurrently with 7205)*

This course gives students an overview of the operating and general maintenance systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the automotive industry. Students will study the maintenance and light repair of automotive systems. Also, this course gives students an overview of the electrical operating systems of the modern automobile. Students will be introduced to the safety and operation of equipment and tools used in the electrical diagnosis and repair in the automotive electrical industry. Students will study the fundamentals of electricity and automotive electronics.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7205 BRAKE SYSTEMS NLPS** *(for students in Brake Systems in SY 22-23; must enroll concurrently with 7213)*

This course gives students an in-depth study of vehicle electrical systems. Students will study the fundamentals of electricity and automotive electronics in various automotive systems. Additionally it teaches theory, service and repair of automotive braking systems. This course provides an overview of various mechanical brake systems used on today’s automobiles. This course will emphasize professional diagnosis and repair methods for brake systems.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** Principles of Automotive Services
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**
- **Schools partnering with Vincennes University must offer the program of study as part of a 2-3 period block.**

**N7121 STEERING AND SUSPENSIONS NLPS**

This course takes an in-depth look at engine performance, including concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. This course also takes an in-depth look at engine performance, including advanced concepts in the diagnosis and repair of ignition, fuel, emission and related computer networks. This course presents engine theory and operation and studies the various engine designs utilized today. Hybrid/Alternative fuel technology will also be introduced.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Principles of Automotive Services
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**
- **Schools partnering with Vincennes University must offer the program of study as part of a 2-3 period block.**

**N7156 TECHNICAL SKILLS DEVELOPMENT**

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
N7375 AUTOMOTIVE SERVICE CAPSTONE NLPS
This course further explores important skills and competencies within the Automotive Service Technology Pathway. Topics such as Steering & Suspension, Engine Repair, Climate Control, and Driveline Service. Additionally, Co-Op and Internship opportunities will be available for students.
- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Automotive Services; Brake Systems; Steering and Suspensions
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas

C5974 WORK BASED LEARNING CAPSTONE (WBL) (for students enrolled Automotive Service Technology II in SY 2021-22)
Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.
- Recommended Grade: 12
- Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. CTE Director approval is required.
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum

CONSTRUCTION TRADES PATHWAY
N7130 PRINCIPLES OF CONSTRUCTION TRADES NLPS
Principles of Construction Trades prepares students with the basic skills needed to continue in a construction trade field. Topics will include an introduction to the types and uses for common hand and power tools, learn the types and basic terminology associated with construction drawings, and basic safety. Additionally students will study the roles of individuals and companies within the construction industry and reinforce mathematical and communication skills necessary to be successful in the construction field.
- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7123 CONSTRUCTION TRADES: GENERAL CARPENTRY NLPS
Construction Trades: General Carpentry builds upon the skills learned in the Principles of Construction Trades and examines the basics of framing. This includes studying the procedures for laying out and constructing floor systems, wall systems, ceiling joist and roof framing, and basic stair layout. Additionally, students will be introduced to building envelope systems.
- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Construction Trades; or Principles of Architecture, Engineering and Construction
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7122 CONSTRUCTION TRADES: FRAMING AND FINISHING NLPS
Construction Trades: Framing and Finishing prepares students with advanced framing skills along with interior and exterior finishing techniques. Topics include roofing applications, thermal and moisture protection, exterior finishing, cold-formed steel framing, drywall installation and finishing, doors and door hardware, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Principles of Construction Trades; Construction Trades: General Carpentry
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7156 TECHNICAL SKILLS DEVELOPMENT**

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- **Counts as a directed elective or elective for all diplomas**
- **May be used by a student more than once as long as it is two separate programs of study.**

**N7242 CONSTRUCTION TRADES CAPSTONE NLPS**

The Construction Trades Capstone course covers the basics of electricity and working with concrete. Electrical topics include the National Electric Code, electrical safety, electrical circuits, basic electrical construction drawings, and residential electrical services. Students may also gain an understanding of concrete properties, foundations, slab-on-grades, and vertical and horizontal formwork. The course prepares students for the NCCER Carpentry Forms Level 3 and Electrical Level 1 certificates.

- **Recommended Grade(s):** 11, 12
- **Required Prerequisites:** Principles of Construction Trades; Construction Trades: General Carpentry; and Construction Trades: Framing and Finishing
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- **Counts as a Directed Elective or Elective for all diplomas**

**C5974 WORK BASED LEARNING CAPSTONE (WBL) (for students enrolled in Construction Trades II during SY 2021-22)**

Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- **Recommended Grade:** 12
- **Required Prerequisites:** Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1-3 credits per semester, 6 credits maximum
- **A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.**
- **Counts as a directed elective or elective for all diplomas**

**WELDING PATHWAY**
N7110 PRINCIPLES OF WELDING TECHNOLOGY NLPS
Principles of Welding Technology includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and basic welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Designer, Researcher, or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for postsecondary and career success.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Advanced Manufacturing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7111 SHIELDED METAL ARC WELDING NLPS
Shielded Metal Arc Welding involves the theory and application of the Shielded Metal Arc Welding process. Process theory will include basic electricity, power sources, electrode selection, and all aspects pertaining to equipment operation and maintenance. Laboratory welds will be performed in basic weld joints with a variety of electrodes in the flat, horizontal and vertical positions. Emphasis will be placed on developing the basic skills necessary to comply with AWS industry standards.

- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Welding Technology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7101 GAS WELDING PROCESSES NLPS
Gas Welding Processes is designed to cover the operation of Gas Metal Arc Welding (MIG) equipment. This will include all settings, adjustments and maintenance needed to weld with a wire feed system. Instruction on both short-arc and spray-arc transfer methods will be covered. Tee, lap, and open groove joints will be done in all positions with solid, fluxcore, and aluminum wire. Test plates will be made for progress evaluation. Schools may choose to offer the course as a comprehensive MIG Welding course or a combination of introductory MIG and TIG Welding operations.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Welding Technology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Schools may choose to cover both introductory MIG and TIG Welding. This configuration is available for dual credit through ITCC.

N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study

N7226 WELDING TECHNOLOGY CAPSTONE NLPS
The Welding Technology Capstone course builds upon the knowledge and skills developed in Welding Fundamentals, Shielded Metal Arc Welding, and Gas Metal Arc Welding by developing advanced welding skills in Gas Tungsten Arc Welding (TIG), Pipe Welding, and Fabrication. As a capstone course, students should have the opportunity to apply their knowledge and use skills through an intensive workbased learning experience.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Welding Technology; Shielded Metal Arc Welding; Gas Welding Processes
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a Directed Elective or Elective for all diplomas

C5974 WORK BASED LEARNING CAPSTONE (WBL)
Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/ supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

Recommended Grade: 12
Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study.
Worksite placement must align to the student pathway. CTE Director approval is required.
Recommended Prerequisites: none
Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
Counts as a directed elective or elective for all diplomas

CULINARY ARTS PATHWAY
C5346 CULINARY ARTS AND HOSPITALITY II: CULINARY ARTS
Culinary Arts and Hospitality II: Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work based experiences in the food industry are strongly encouraged. A standards-based plan guides the students’ laboratory and work based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with post-secondary programs is encouraged.
Recommended Grade: 12
Required Prerequisites: Culinary Arts and Hospitality I
Recommended Prerequisites: none
Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
Counts as a directed elective or elective for all diplomas

C5974 WORK BASED LEARNING CAPSTONE (WBL)
Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/ supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based
experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- **Recommended Grade:** 12
- **Required Prerequisites:** Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1-3 credits per semester, 6 credits maximum
- **A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- **Counts as a directed elective or elective for all diplomas**

**N7173 PRINCIPLES OF CULINARY AND HOSPITALITY NLPS**
Principles of Culinary and Hospitality is designed to develop an understanding of the hospitality industry and career opportunities, and responsibilities in the food service and lodging industry. Introduces procedures for decision making which affects operation management, products, labor, and revenue. Additionally, students will learn the fundamentals of food preparation, basic principles of sanitation, service procedures, and safety practices in the food service industry including proper operation techniques for equipment.

- **Recommended Grade(s):** 10
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7171 NUTRITION NLPS**
Nutrition students will learn the characteristics, functions and food sources of the major nutrient groups and how to maximize nutrient retention in food preparation and storage. Students will be made aware of nutrient needs throughout the life cycle and to apply those principles to menu planning and food preparation. This course will engage students in hands-on learning of nutritional concepts such as preparing nutrient dense meals or examining nutritional needs of student athletes.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Principles of Culinary and Hospitality
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7169 CULINARY ARTS NLPS**
Culinary Arts teaches students how to prepare the four major stocks, the five mother sauces (in addition to smaller sauces) and various soups. Additional emphasis is placed on the further development of the classical cooking methods. This course will also present the fundamentals of baking science including terminology, ingredients, weights and measures, and proper use and care of equipment. Students will produce yeast goods, pies, cakes, cookies, and quick breads.

- **Recommended Grade(s):** 10, 11, 12
- **Required Prerequisites:** Principles of Culinary and Hospitality
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**N7233 CULINARY ARTS CAPSTONE NLPS**
This course covers the techniques and skills needed in breakfast cookery as well as insight into the pantry department. Various methods of preparation of eggs, pancakes, waffles and cereals will be discussed. Students will receive instruction in salad preparation, salad dressing, hot and cold sandwich preparation, garnishes and appetizers. This course also covers the necessary skills for proper recruiting, staffing, training, and management of employees at various levels. The course will help prepare the student for the transition from employee to supervisor. Additionally, it will help the student evaluate styles of leadership, and develop skills in human relations and personnel management.

- **Recommended Grade(s):** 11, 12
- **Required Prerequisites:** Principles of Culinary and Hospitality; Nutrition; Culinary Arts
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- **Counts as a Directed Elective or Elective for all diplomas**
COSMETOLOGY PATHWAY

C5806 COSMETOLOGY II
Cosmetology II builds on concepts learned in Cosmetology I with an emphasis on the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology.

- Recommended Grade: 12
- Required Prerequisites: Cosmetology I
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

N7330 PRINCIPLES OF COSMETOLOGY NLPS
Principles of Cosmetology offers an introduction to cosmetology with emphasis on basic practical skills and theories including roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, and bacteriology and sanitation. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Recommended Grade(s): 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

N7331 COSMETOLOGY FUNDAMENTALS NLPS
Barbering and Cosmetology Fundamentals focuses on the development of practical skills introduced in Principles of Cosmetology. Clinical application and theory in the science of cosmetology are introduced. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Barbering and Cosmetology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

N7332 ADVANCED COSMETOLOGY
Advanced Cosmetology will emphasize the development of advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology as it applies to cosmetology. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Barbering and Cosmetology; Barbering and Cosmetology Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- This course may require extended hours of participation in order to meet the 1500 hours required for the Cosmetology and Barbering exams.

N7334 COSMETOLOGY CAPSTONE NLPS
Barbering and Cosmetology Capstone builds and improves previously developed skills with emphasis on developing individual techniques. Professionalism, shop management, psychology in relation to cosmetology, and preparation for state board examination are stressed. Successful completion of the course requires at least 375 Cosmetology studio hours.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Barbering and Cosmetology; Barbering and Cosmetology Fundamentals; Advanced Cosmetology or Advanced Barbering
- Recommended Prerequisites: none
C6152 HOSPITALITY AND HUMAN SERVICES: SPECIAL TOPICS
Hospitality and Human Services: Special Topics is an extended learning experience designed to address the advancement and specialization of careers within the career cluster through the provision of a specialized course for a specific workforce need in the school’s region. The learning experience is at a qualified site, and is designed to give the student the opportunity to learn and practice technical skills; while working under the direction of the appropriately licensed professional. Throughout the course, students will focus on learning about employment opportunities and obtaining the knowledge, skills and attitudes essential for success in specific occupations. Course standards and curriculum must be tailored to the specific profession, preparing students to advance in this career field, and where applicable, provide students with opportunities for certification or dual credit. Participation in a related CTSO encourages the development of leadership, communication and career related skills, and opportunities for community service.

- Recommended Grade(s): 11
- Required Prerequisites: none
- Recommended Prerequisites: CTE courses that would help prepare the student for success in this area.
- Credits: 1 semester course, up to 3 credits per semester. May be offered for successive semesters up to 12 credits.
- Counts as a directed elective or elective for all diplomas
- Schools must have an approved Nonstandard Course Waiver on file to be eligible for CTE Funding.
ARSENAL TECHNICAL HIGH SCHOOL

STEM Academy

Pathways Offered:
- Animal Science | Civil Engineering | Computer Science
- Healthcare Specialist (Nursing) | Medical Assistant (CCMA)

ANIMAL SCIENCE PATHWAY

N7117 PRINCIPLES OF AGRICULTURE NLPS
Principles of Agriculture is a two-semester course that will cover the diversity of the agricultural industry and agribusiness concepts. Students will develop an understanding of the role of agriculture in the United States and globally. Students will explore Agriculture, Food, and Natural Resource (AFNR) systems related to the production of food, fiber and fuel and the associated health, safety and environmental management systems. Topics covered in the course range from animals, plants, food, natural resources, ag power, structures and technology, and agribusiness. Participation in FFA and Supervised Agricultural Experiences (SAE) will be an integral part of this course in order to develop leadership and career ready skills.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective credits for all diplomas

C5008 ANIMAL SCIENCE
Animal Science is a two semester course that provides students with an overview of the animal agriculture industry. Students participate in a large variety of activities and laboratory work including real and simulated animal science experiences and projects. All areas that the students study may be applied to both large and small animals. Topics to be covered in the course include: history and trends in animal agriculture, laws and practices relating to animal agriculture, comparative anatomy and physiology of animals, biosecurity threats and interventions relating to animal and human safety, nutrition, reproduction, careers, leadership, and supervised agricultural experiences relating to animal agriculture.

- Recommended Grade: 11, 12
- Required Prerequisites: Principles of Agriculture*
- Recommended Prerequisites: Introduction to Agriculture, Food and Natural Resources
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

C5070 ADVANCED LIFE SCIENCE, ANIMALS (L)
Advanced Life Science: Animals is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students will explore concepts related to history and trends in animal agriculture as related to animal welfare, husbandry, diseases and parasites, laws and practices relating to handling, housing, environmental impact, global sustainable practices of animal agriculture, genetics, breeding practices, biotechnology uses, and comparative knowledge of anatomy and physiology of animals used in animal agriculture.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Agriculture; Animal Science; Food and Natural Resources; Biology; Chemistry; Integrated Chemistry Physics
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an elective or directed elective for all diplomas.
- Fulfills a science requirement for all diplomas.
- Qualifies as a quantitative reasoning course

N7262 AGRICULTURE RESEARCH CAPSTONE NLPS
Agricultural Research Capstone course includes extended laboratory, field, and literature investigations in one or more specialized agricultural science disciplines, such as animal, plant, food, natural resources, biotechnology, engineering, etc. Students enrolled in this course will apply scientific applications, concepts, principles, and design process to solve complex, real-world issues in agriculture. Students will become familiar with laboratory procedures used in an educational, research, or industrial setting. Students will complete an end-of-course project and presentation, such as a scientific research paper, agriscience fair project, or some other suitable presentation of their findings.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Any Agriculture Concentrator Sequence
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits max

CIVIL ENGINEERING PATHWAY

C4802 INTRODUCTION TO ENGINEERING DESIGN
Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented. NOTE: This course aligns with the PLTW Introduction to Engineering Design curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

- Recommended Grade(s): 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C5644 PRINCIPLES OF ENGINEERING
Principles of Engineering is a course that focuses on the process of applying engineering, technological, scientific and mathematical principles in the design, production, and operation of products, structures, and systems. This is a hands-on course designed to provide students interested in engineering careers to explore experiences related to specialized fields such as civil, mechanical, and materials engineering. Students will engage in research, development, planning, design, production, and project management to simulate a career in engineering. The topics of ethics and the impacts of engineering decisions are also addressed. Classroom activities are organized to allow students to work in teams and use modern technological processes, computers, CAD software, and production systems in developing and presenting solutions to engineering problems.

- Recommended Grade(s): 11
- Required Prerequisites: Introduction to Engineering Design
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

C5650 CIVIL ENGINEERING AND ARCHITECTURE
Civil Engineering and Architecture introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should 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, water resources, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Engineering
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Qualifies as a quantitative reasoning course
COMPUTER SCIENCE PATHWAY

C5236 COMPUTER SCIENCE II
Computer Science II explores and builds skills in programming and a basic understanding of the fundamentals of procedural program development using structured, modular concepts. Coursework emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers, and data file access methods. An emphasis on logical program design using a modular approach, which involves task-oriented program functions.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Computer Science I
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

C7183 PRINCIPLES OF COMPUTING NLPS
Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Recommended Grade(s): 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7351 TOPICS IN COMPUTER SCIENCE NLPS
Topics in Computer Science is designed for students to investigate emerging disciplines within the field of computer science. Students will use foundational knowledge from 7183 Principles of Computing to study the areas of data science, artificial intelligence, app/game development, and security. Students will utilize knowledge related to these areas and programming skills to develop solutions to authentic problems.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7352 COMPUTER SCIENCE NLPS
Computer Science introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- The AP Computer Science A curriculum may be used to complete the competencies required for this course.

HEALTHCARE SPECIALIST (NURSING) PATHWAY

C7168 PRINCIPLES OF HEALTHCARE NLPS
Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
C5274 MEDICAL TERMINOLOGY NLPS
Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in constructing and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

N7166 HEALTHCARE SPECIALIST: CNA NLPS
The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

N7255 HEALTH CARE SPECIALIST CAPSTONE NLPS
The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor’s offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

**C5974 WORK BASED LEARNING CAPSTONE (WBL)**

Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- **Recommended Grade:** 12
- **Required Prerequisites:** Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1-3 credits per semester, 6 credits maximum
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- **Counts as a directed elective or elective for all diplomas**

**MEDICAL ASSISTANT PATHWAY (CCMA)**

**C6138 ADVANCED CAREER & TECHNICAL EDUCATION, COLLEGE CREDIT: HEALTH SCIENCE**

Advanced Career and Technical Education, College Credit is a course title covering any CTE advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. The intent of this course is to allow students to earn college credit for courses with content that goes beyond that currently approved for high school credit. This course may be used for any dual enrollment course, including a joint program of study involving a postsecondary partnership. **NOTE: This course can be co-req'd with Health Science II: Nursing. Students should be 18 years old by Jan. 1, 2023 to meet the externship requirements.**

- **Recommended Grade:** 12
- **Required Prerequisites:** Health Sciences I and II
- **Recommended Prerequisites:** CTE courses that would help prepare the student for success in this area.
- **Credits:** 1 semester course, up to 3 credits per semester, May be offered for successive semesters up to 12 credits
- **Counts as a directed elective or elective for all diplomas**

**C7168 PRINCIPLES OF HEALTHCARE NLPS**

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

**C5274 MEDICAL TERMINOLOGY NLPS**

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

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- **Counts as a directed elective or elective for all diplomas**
N7166 HEALTHCARE SPECIALIST: CNA NLPS
The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare & Medical Terminology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study

C7164 Certified Clinical Medical Assistant (CCMA)
The Certified Clinical Medical Assistant course will prepare students for the National Healthcare Association CCMA exam. Instruction includes taking and recording vital signs, preparing patients for examination, patient education, and assisting the physician during the exam. The collecting and preparation of laboratory specimen and basic laboratory test will be covered. Prepares for the administration of medication, venipuncture, ECG, and wound care. Provides a basic understanding of the clinical and administrative duties and responsibilities pertinent to medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures, appointment scheduling, receptionist duties, and processing mail. Written, verbal and nonverbal communications according to patient needs are covered as well as documentation and associated legal and ethical boundaries.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Schools are strongly encouraged to offer the CCMA course along with Principles of Healthcare and Medical Terminology as part of a 3 period block of time.

N7255 HEALTH CARE SPECIALIST CAPSTONE NLPS
The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor’s offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas.
ARSENAL TECHNICAL HIGH SCHOOL

Teaching, Leading, and Learning Academy

Pathways Offered:

Early Childhood Education | Education Professions

EARLY CHILDHOOD EDUCATION PATHWAY

N7160 PRINCIPLES OF EARLY CHILDHOOD EDUCATION NLPS
This course provides students with an overview of skills and strategies necessary to successfully complete a certificate. Additionally, it provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula and services available to young children. This course also examines basic principles of child development, Developmentally Appropriate Practices (DAP), importance of family, licensing, and elements of quality care of young children with an emphasis on the learning environment related to health, safety, and nutrition. Students may be required to complete observations and field experiences with children as related to this course.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7158 EARLY CHILDHOOD EDUCATION CURRICULUM NLPS

Early Childhood Education Curriculum examines developmentally appropriate environments and activities in various childcare settings while exploring the varying developmental levels and cultural backgrounds of children. Students may be required to complete observations and field experiences with children as related to this course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Early Childhood Education
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diploma

N7159 EARLY CHILDHOOD EDUCATION GUIDANCE NLPS

This course allows students to analyze developmentally appropriate guidance, theory and implementation for various early care and education settings. It also provides a basic understanding of the anti-bias/multicultural emphasis in the field of early childhood. Students may be required to complete observations and field experiences with children as related to this course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Early Childhood Education
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diploma

N7259 EARLY CHILDHOOD EDUCATION CAPSTONE NLPS

This course will prepare students to complete the application, CDA exam, and verification process for the Child Development Associate (CDA) credential. Students may also study the physical, social, emotional, cognitive, and moral development of children from conception to age Twelve. Theories of child development, biological and environmental foundations, prenatal development, the birth process, and the newborn baby will be discussed. Additionally, students will explore the aspects of early literacy skill development in young children from birth through third grade. Students will explore techniques, technological tools and other learning opportunities that encourage positive attitudes in children regarding listening, speaking, reading and writing activities. In the course, students will research, examine and explore the use of observation in screening and assessment to promote healthy literacy development in early childhood education. Finally, students will be provided an introduction to caring for each exceptional child. This includes theories and practices for producing optimal developmental growth. Students may be required to complete observations and field experiences with children as related to this course.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Early Childhood Education; Early Childhood Curriculum; Early Childhood Guidance
- Recommended Prerequisites: none
EDUCATION PROFESSIONS PATHWAY

N7161 PRINCIPLES OF TEACHING NLPS
This course provides a general introduction to the field of teaching. Students will explore educational careers, teaching preparation, and professional expectations as well as requirements for teacher certification. Current trends and issues in education will be examined. A minimum 20 hour classroom observation experience is required for successful completion of this course.
- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7157 CHILD AND ADOLESCENT DEVELOPMENT NLPS
Child and Adolescent Development examines the physical, social, emotional, cognitive, and moral development of the child from birth through adolescence with a focus on the middle years through adolescence. Basic theories of child development, biological and environmental foundations of development, and the study of children through observation and interviewing techniques are explored. The influence of parents, peers, the school environment, culture and the media are discussed. An observation experience up to 20 hours may be required for completion of this course. This course has been approved to be offered for dual credit. Students pursuing this course for dual credit are still required to meet the minimum prerequisites for the course and pass the course with a C or better in order for dual credit to be awarded.
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Teaching
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7162 TEACHING AND LEARNING NLPS
Teaching and Learning provides students the opportunity to apply many of the concepts that they have learned throughout the Education Professions pathway. In addition to a focus on best practices, this course will provide an introduction to the role that technology plays in the modern classroom. Through hands-on experience with educational software, utility packages, and commonly used microcomputer hardware, students will analyze ways to integrate technology as a tool for instruction, evaluation, and management.
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Teaching
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7267 EDUCATION PROFESSIONS CAPSTONE NLPS
The Education Professions Capstone provides an extended opportunity for field experience to further apply concepts that have been presented throughout the pathway. Students will also have the opportunity to explore the topics of the exceptional child and literacy development through children's literature. Students will gain a deeper understanding of inclusive teaching techniques along with policies, theories, and laws related to special education. Students interested in pursuing a career in Elementary Education are encouraged to also study the benefits of using children's literature in the classroom. This course may be further developed to include specific content for students interested in pursuing a career in secondary education. The course should include a significant classroom observation and assisting experience.
- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Teaching; Child and Adolescent Development, Teaching and Learning
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
CRISPUS ATTUCKS HIGH SCHOOL

Health Science Academy

Pathways Offered:

- Biomedical Sciences | Central Service Technician
- Healthcare Specialist (Nursing) | Medical Assistant (CCMA)

BIOMEDICAL SCIENCES PATHWAY

C5218 PRINCIPLES OF BIOMEDICAL SCIENCES

Principles of the Biomedical Sciences provides an introduction to this field through “hands-on” projects and problems. Student work involves the study of human medicine, research processes and an introduction to bioinformatics. Students investigate the human body systems and various health conditions including heart disease, diabetes, hypercholesterolemia, and infectious diseases. A theme through the course is to determine the factors that led to the death of a fictional person. After determining the factors responsible for the death, the students investigate lifestyle choices and medical treatments that might have prolonged the person’s life. Key biological concepts included in the curriculum are: homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Engineering principles such as the design process, feedback loops, fluid dynamics, and the relationship of structure to function will be included where appropriate. The course is designed to provide an overview of all courses in the Biomedical Sciences program and to lay the scientific foundation necessary for student success in the subsequent courses.

- Recommended Grade(s): 10
- Required Prerequisites: Biology I or concurrent enrollment in Biology I is required
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diplomas

C5216 HUMAN BODY SYSTEMS

Human Body Systems is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress, and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. NOTE: This course aligns with the PLTW Human Body Systems curriculum. Use of the PLTW Curriculum may require additional training and membership in the PLTW network.

- Recommended Grade(s): 11
- Required Prerequisites: Principles of Biomedical Sciences
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diplomas

C5217 MEDICAL INTERVENTIONS

Medical Interventions is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. This course should be co-req’d with 5219 Biomedical Innovations.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Biomedical Sciences
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science requirement for all diploma types

C5219 BIOMEDICAL INNOVATIONS CAPSTONE
Biomedical Innovation is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st Century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. Students have the opportunity to work on an independent project and may work with a mentor or advisor from a healthcare or postsecondary industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. This course should be co-req'd with 5217 Medical Interventions.

- **Recommended Grade(s):** 12
- **Required Prerequisites:** Principles of Biomedical Sciences; Human Body Systems or Anatomy and Physiology; Medical Interventions
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

### CENTRAL SERVICES TECHNICIAN PATHWAY

#### C7168 PRINCIPLES OF HEALTHCARE NLPS
Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

#### C5274 MEDICAL TERMINOLOGY NLPS
Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning, spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

- **Recommended Grade(s):** 10, 11
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- **Counts as a directed elective or elective for all diplomas**

#### C7163 CENTRAL SERVICE TECHNICIAN FUNDAMENTALS NLPS
This course introduces students to the field of central service and prepares students to identify surgical instruments by category type and use. Students will learn the principles and importance of the flow of material along with the environmental control factors affecting the central service department. The student will differentiate between equipment management systems and compare out-sourcing and insourcing.

- **Recommended Grade(s):** 11, 12
- **Required Prerequisites:** Principles of Healthcare
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- **Counts as a directed elective or elective for all diplomas**

#### N7257 CENTRAL SERVICE TECHNICIAN CAPSTONE NLPS
Central Services Technician Capstone course emphasizes the practice of sterilization skills that have been learned in previous courses. Students will focus on high and low sterilization methods. Students will differentiate between the various sterilization methods. Students will learn the protocol for control infection and the spread of blood borne pathogens. Additionally, this course will provide students the opportunity to complete practical hours toward the hours required to complete the International Association of Healthcare Central Services Material Management Certification Exam.

- **Recommended Grade(s):**
- **Required Prerequisites:**
- **Recommended Prerequisites:**
- **Credits:** 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
HEALTHCARE SPECIALIST (NURSING) PATHWAY

C5974 WORK BASED LEARNING CAPSTONE (WBL)

Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- Recommended Grade: 12
- Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- Counts as a directed elective or elective for all diplomas

C7168 PRINCIPLES OF HEALTHCARE NLPS

Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C5274 MEDICAL TERMINOLOGY NLPS

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

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Counts as a directed elective or elective for all diplomas

N7166 HEALTHCARE SPECIALIST: CNA NLPS

The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants. This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in long-term care facilities.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare & Medical Terminology
- Recommended Prerequisites: none
N7156 TECHNICAL SKILLS DEVELOPMENT
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study.

N7255 HEALTH CARE SPECIALIST CAPSTONE NLPS
The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care settings beyond a long term care facility, including hospitals, doctor’s offices and clinics. Students can accomplish this goal by completing coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a directed elective or elective for all diplomas.

MEDICAL ASSISTANT PATHWAY (CCMA)
C6138 ADVANCED CAREER & TECHNICAL EDUCATION, COLLEGE CREDIT: HEALTH SCIENCE (for students enrolled in Health Science II: Nursing in SY 2021-22 and interested in earning CCMA certification)
Advanced Career and Technical Education, College Credit is a course title covering any CTE advanced course offered for credit by an accredited post-secondary institution through an adjunct agreement with a secondary school. The intent of this course is to allow students to earn college credit for courses with content that goes beyond that currently approved for high school credit. This course may be used for any dual enrollment course, including a joint program of study involving a postsecondary partnership. NOTE: This course can be co-req’d with Health Science II: Nursing. Students should be 18 years old by Jan. 1, 2023 to meet externship requirements.

- Recommended Grade: 12
- Required Prerequisites: none
- Recommended Prerequisites: CTE courses that would help prepare the student for success in this area.
- Credits: 1 semester course, up to 3 credits per semester, May be offered for successive semesters up to 12 credits
- Counts as a directed elective or elective for all diplomas.

C7168 PRINCIPLES OF HEALTHCARE NLPS
Principles of Healthcare content includes skills common to specific health career topics such as patient nursing care, dental care, animal care, medical laboratory, public health, and an introduction to healthcare systems. Lab experiences are organized and planned around the activities associated with the student’s career objectives.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C5274 MEDICAL TERMINOLOGY NLPS
Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings, all taught within the
context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal and written
information in the healthcare industry. Students have the opportunity to acquire essential skills for accurate and logical communication, and
interpretation of medical records. Emphasis is on forming a foundation of a medical vocabulary including; appropriate and accurate meaning,
spelling, and pronunciation of medical terms, and abbreviations, signs, and symbols.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, maximum of 2 credits
- Counts as a directed elective or elective for all diplomas

**N7166 HEALTHCARE SPECIALIST: CNA NLPS**
The Healthcare Specialist: CNA prepares individuals desiring to work as nursing assistants with the knowledge, skills and attitudes essential for
providing basic care in extended care facilities, hospitals and home health agencies under the direction of licensed nurses. The course will
introduce students to the disease process and aspects of caring for a long-term care resident with dementia. Individuals who successfully
complete this course are eligible to apply to sit for the Indiana State Department of Health (ISDH) certification exam for nursing assistants.
This course meets the minimum standards set forth by the ISDH for Certified Nursing Assistant training and for health care workers in
long-term care facilities.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare & Medical Terminology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**N7156 TECHNICAL SKILLS DEVELOPMENT**
The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills
learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a
work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical
Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study

**C7164 Certified Clinical Medical Assistant (CCMA)**
The Certified Clinical Medical Assistant course will prepare students for the National Healthcare Association CCMA exam. Instruction includes
taking and recording vital signs, preparing patients for examination, patient education, and assisting the physician during the exam. The
collecting and preparation of laboratory specimen and basic laboratory test will be covered. Prepares for the administration of medication,
venipuncture, ECG, and wound care. Provides a basic understanding of the clinical and administrative duties and responsibilities pertinent to
medical offices. Includes instruction in medical correspondence and records, case histories of patients, filing, telephone procedures,
appointment scheduling, receptionist duties, and processing mail. Written, verbal and nonverbal communications according to patient needs
are covered as well as documentation and associated legal and ethical boundaries.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Schools are strongly encouraged to offer the CCMA course along with Principles of Healthcare and Medical Terminology as part of a 3
  period block of time.

**N7255 HEALTH CARE SPECIALIST CAPSTONE NLPS**
The capstone course will provide Healthcare students acquire additional knowledge and skills necessary to work in a variety of health care
settings beyond a long term care facility, including hospitals, doctor’s offices and clinics. Students can accomplish this goal by completing
coursework that will cover topics such as Medical Law and Ethics, Electronic Health Records, and/or Behavioral Health. Schools may offer
additional healthcare certifications such as the Certified Clinical Medical Assistant or Phlebotomy along with the coursework or in place of the coursework.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Healthcare; Medical Terminology; Healthcare Specialist: CNA, EMT or Certified Clinical Medical Assistant (CCMA)
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas.
CRISPUS ATTUCKS HIGH SCHOOL

Computer Science Academy

Pathways Offered:

Computer Science

COMPUTER SCIENCE PATHWAY

C7183 PRINCIPLES OF COMPUTING NLPS
Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7351 TOPICS IN COMPUTER SCIENCE NLPS
Topics in Computer Science is designed for students to investigate emerging disciplines within the field of computer science. Students will use foundational knowledge from 7183 Principles of Computing to study the areas of data science, artificial intelligence, app/game development, and security. Students will utilize knowledge related to these areas and programming skills to develop solutions to authentic problems.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7352 COMPUTER SCIENCE NLPS
Computer Science introduces the fundamental concepts of procedural programming. Topics include data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. The course also offers an introduction to the historical and social context of computing and an overview of computer science as a discipline.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- The AP Computer Science A curriculum may be used to complete the competencies required for this course.

N7353 COMPUTER SCIENCE CAPSTONE NLPS
Computer Science Capstone provides a working understanding of the fundamentals of procedural and object-oriented program development using structured, modular concepts and modern object-oriented programming languages. Reviews control structures, functions, data types, variables, arrays, and data file access methods. The course is a second level computer science course introducing object oriented computer programming, using a language such as Java or C++. Object-oriented concepts studied include classes, objects, inheritance, polymorphism, operator overloading, exception handling, recursion, abstract data types, streams and file I/O. Students will explore programming concepts such as software reuse, data abstraction and event-driven programming.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Computing; Topics in Computer Science; Computer Science
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
CRISPUS ATTUCKS HIGH SCHOOL
Teaching, Leading and Learning Academy
Pathways Offered:
Early Childhood Education | Education Professions

EARLY CHILDHOOD EDUCATION PATHWAY (will sunset after 2023-24)
C5406 EARLY CHILDHOOD EDUCATION II
Early Childhood Education II prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child related careers. ECE II is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. In ECE II students further refine, develop, and document the knowledge, skills, attitudes, and behaviors gained in the foundational course. These include rigorous levels of self-critique and reflection, performance assessments by instructors, parents, and other professionals, comprehensive assessment of knowledge through a standardized exam, and other professional documentation. Extensive experiences in one or more early childhood education settings are required: a minimum total of 480 hours must be accrued in ECE I and ECE II. These experiences may be either school-based or "on-the-job" in community-based early childhood education centers, or in a combination of the two. A standards-based plan for each student guides the early childhood education experiences. Students are monitored in these experiences by the Early Childhood Education II teacher. Dual credit agreements with post-secondary programs are encouraged.

- Recommended Grade: 12
- Required Prerequisites: Early Childhood Education I
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas

EDUCATION PROFESSIONS PATHWAY (will sunset after 2023-24)
C5404 EDUCATION PROFESSIONS II
Education Professions II prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. A standards-based plan guides the students’ field experiences. Students are monitored in their field experiences by the Education Professions II teacher. Articulation with postsecondary programs is encouraged.

- Recommended Grade: 12
- Required Prerequisites: Education Professions I
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a directed elective or elective for all diplomas
GEORGE WASHINGTON HIGH SCHOOL

Advanced Manufacturing Academy
Pathways Offered:

Automation and Robotics | Design Technology

AUTOMATION AND ROBOTICS/ADVANCED MANUFACTURING PATHWAY
N7108 PRINCIPLES OF ADVANCED MANUFACTURING NLPS

Principles of Advanced Manufacturing is a course that includes classroom and laboratory experiences in Industrial Technology and Manufacturing Trends. Domains include safety and impact, manufacturing essentials, lean manufacturing, design principles, and careers in advanced manufacturing. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Advanced Manufacturing
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7103 ADVANCED MANUFACTURING TECHNOLOGY NLPS

Advanced Manufacturing Technology introduces manufacturing processes and practices used in manufacturing environments. The course also covers key electrical principles, including current, voltage, resistance, power, inductance, capacitance, and transformers, along with basic mechanical and fluid power principles. Topics include, types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution will be covered. Students will be expected to understand the product life cycle from conception through distribution. This course also focuses on technologies used in production processes. Basic power systems, energy transfer systems, machine operation and control will be explored. This course will use lecture, lab, online simulation and programming to prepare students for Certified Production Technician Testing through Manufacturing Skill Standards Council (MSSC).

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Advanced Manufacturing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7106 MECHATRONICS SYSTEMS NLPS

Mechatronics Systems covers the basic electrical and mechanical components and functions of a complex mechatronics system. Through a systems approach, students will learn about mechanical components which lead and support the energy through a mechanical system to increase efficiency and to reduce wear and tear. By understanding the complete system, students will learn and apply troubleshooting strategies to identify, localize and (where possible) to correct malfunctions. Preventive maintenance of mechanical elements and electrical drives as well as safety issues within the system will also be discussed.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Advanced Manufacturing; Advanced Manufacturing Technology
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7224 INDUSTRIAL AUTOMATION AND ROBOTICS CAPSTONE NLPS

The Automation and Robotics Capstone course focuses on the installation, maintenance, and repair of industrial robots. Students will also learn the basics of pneumatic, electro pneumatic and hydraulic control circuits as well as the basic theory, fundamentals of digital logic, and programming of programmable logic controllers (PLCs) in a complex mechatronic system. Students will learn to identify malfunctioning robots and to apply troubleshooting strategies to identify and localize problems caused by pneumatic and hydraulic control circuits and PLC hardware. Completing the capstone course will provide students the opportunity to earn a postsecondary certificate and will prepare students to take nationally recognized industry certification exams. Hands-on projects and team activities will allow students to apply learning on the latest industry technologies. Extended work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience.
C5974 WORK BASED LEARNING CAPSTONE (WBL) (for students enrolled in Adv. Manufacturing II in SY 2021-22)

Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- **Recommended Grade:** 12
- **Required Prerequisites:** Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- **Recommended Prerequisites:** none
- **Credits:** 1 semester course, 1-3 credits per semester, 6 credits maximum
- **A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- **Counts as a directed elective or elective for all diplomas**

DESIGN TECHNOLOGY PATHWAY

C4802 INTRODUCTION TO ENGINEERING DESIGN

Introduction to Engineering Design is a fundamental pre-engineering course where students become familiar with the engineering design process. Students work both individually and in teams to design solutions to a variety of problems using industry standard sketches and current 3D design and modeling software to represent and communicate solutions. Students apply their knowledge through hands-on projects and document their work with the use of an engineering notebook. Students begin with completing structured activities and move to solving open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Ethical issues related to professional practice and product development are also presented. **NOTE:** This course aligns with the PLTW Introduction to Engineering Design curriculum. Use of the PLTW curriculum may require additional training and membership in the PLTW network.

- **Recommended Grade(s):** 10
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**

N7196 MECHANICAL AND ARCHITECTURAL DESIGN NLPS

Mechanical and Architectural Design provides students with a basic understanding of creating working drawings related to manufacturing detailing and assembly as well as a survey of Architectural design focused on the creative design of buildings. Topics include fastening devices, thread symbols and nomenclature, surface texture symbols, classes of fits, and the use of parts lists, title blocks and revision blocks. From an Architecture perspective, this course covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, and selection of structure and construction techniques.

- **Recommended Grade(s):** 11
- **Required Prerequisites:** Introduction to Engineering Design
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- **Counts as a directed elective or elective for all diplomas**
N7202 MANUFACTURING PRINCIPLES AND DESIGN NLPS
Manufacturing Principles and Design will challenge students to use 2D and 3D CAD skills to explore topics related to manufacturing principles and design. Students will gain an understanding of solid modeling and parametric solid modeling and use 3D printers to create industry part prints. Additionally, students will compare manufacturing practices like Lean Manufacturing, design and program CNC processes, and use metrology tools and practices to evaluate an object.

- Recommended Grade(s): 9, 10, 11
- Required Prerequisites: Introduction to Engineering Design; Mechanical and Architectural Design Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7223 MECHANICAL DESIGN CAPSTONE NLPS
Mechanical Design Capstone covers a broad range of design techniques that are critical for the Manufacturing industry. Students will have the chance to study solid modeling techniques and design, fundamental principles of geometric dimensioning and tolerancing, Solidworks design software, and an introduction to additive manufacturing.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Introduction to Engineering Design; Mechanical and Architectural Design Fundamentals; Manufacturing Principles and Design
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
GEORGE WASHINGTON HIGH SCHOOL

Business and Finance Academy

Pathways Offered:
- Business Administration
- Banking and Investment
- Supply Chain Management

BUSINESS ADMINISTRATION/ENTREPRENEURSHIP PATHWAY

B4562 PRINCIPLES OF BUSINESS MANAGEMENT NLPS
Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Digital Applications and Responsibility
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7143 MANAGEMENT FUNDAMENTALS NLPS
Management Fundamentals describes the functions of managers, including the management of activities and personnel. Describes the judicial system and the nature and sources of law affecting business. Studies contracts, sales contracts with emphasis on Uniform Commercial Code Applications, remedies for breach of contract and tort liabilities. Examines legal aspects of property ownership, structures of business ownership, and agency relationships.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

B4524 ACCOUNTING FUNDAMENTALS NLPS
Accounting Fundamentals 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 decisionmaking.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective all diplomas
- Principles course is not required until 24-25 school year because this course is included in Perkins V pathways.
- Formerly Introduction to Accounting

N7256 BUSINESS ADMINISTRATION CAPSTONE NLPS
The Business Administration Capstone course will allow students to explore advanced topics in business leadership including Human Resources and International Business. Additionally students will have the chance to complete Managerial Accounting. Throughout the course students will develop business communication skills through work on projects, labs, and simulations. All of these courses represent key business competencies required by nearly all postsecondary Business schools.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management; Management Fundamentals; Accounting Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
BANKING AND INVESTMENT PATHWAY

B4562 PRINCIPLES OF BUSINESS MANAGEMENT NLPS
Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.
- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Digital Applications and Responsibility
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

C7150 PERSONAL FINANCE AND BANKING NLPS
Personal Finance and Banking emphasizes management of individual financial resources for growth and maintenance of personal wealth. Covers home buying and mortgage financing, installment financing, life and health insurance, securities, commodities and other investment opportunities. Students will gain an overview of banking industry and the financial services provided by banks for individuals and businesses.
- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

B5258 FINANCE AND INVESTMENT NLPS
Finance and Investments addresses the need of schools in areas that have workforce demand in the finance industry. It analyzes and synthesizes high-level skills needed for a multitude of careers in the banking and investment industry. Students learn banking, investments, and other finance fundamentals and applications related to financial institutions, business and personal financial services, investment and securities, risk management products, and corporate finance.
- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management; Personal Finance and Banking or Accounting Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7265 FINANCE AND INVESTMENT CAPSTONE NLPS
The Finance and Investment Capstone course would include content on Credit and Collections, Real Estate, Business Law and possibly Accounting.
- Recommended Grade(s): 12
- Required Prerequisites: Principles of Business Management; Personal Finance and Banking or Accounting Fundamentals; Finance and Investment
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
- Qualifies as a quantitative reasoning course

SUPPLY CHAIN MANAGEMENT PATHWAY

B4562 PRINCIPLES OF BUSINESS MANAGEMENT NLPS
Principles of Business Management examines business ownership, organization principles and problems, management, control facilities, administration, financial management, and development practices of business enterprises. This course will also emphasize the identification and practice of the appropriate use of technology to communicate and solve business problems and aid in decision making. Attention will be given to developing business communication, problem-solving, and decision-making skills using spreadsheets, word processing, data management, and presentation software.
- Recommended Grade(s): 10, 11
- Required Prerequisites: none
N7155 LOGISTICS MANAGEMENT NLPS
Logistics Management provides students the opportunity to explore how essential managerial functions relate to the various components of a logistics operation. Logistics concepts are approached from a manufacturing perspective with a focus on system integration and automation and lean manufacturing operations. Topics will include logistics systems, supply chain management, order, demand inventory and warehouse management, and automated components of a logistics system. Students will be prepared for the MSSC Certified Logistics Associate (CLA) and MSSC Certified Logistics Technician (CLT) certifications.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7142 SUPPLY CHAIN MANAGEMENT NLPS
Supply Chain Management will build upon the knowledge and skills developed in the Logistics Management course by focusing on specific aspects of Supply Chain Management such as supply chain strategy, planning and design, customer service, purchasing, forecasting, inventory and warehouse management, as well as an indepth study of transportation systems. Students will examine various modes of transportation and their associated characteristics, economics, and regulations.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Business Management; Logistics Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7258 SUPPLY CHAIN MANAGEMENT CAPSTONE NLPS
Supply Chain Management Capstone course will build upon the knowledge and skills learned in previous courses by taking a deeper dive into Procurement, Operations Management, Lean Manufacturing Systems.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Business Management; Logistics Management; Supply Chain Management
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

C5974 WORK BASED LEARNING CAPSTONE (WBL)
Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. Related Instruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- Recommended Grade: 12
- Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway. **CTE Director approval is required.**
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- Counts as a directed elective or elective for all diplomas
GEORGE WASHINGTON HIGH SCHOOL

Information Technology Academy

Pathways Offered:

Networking  |  Software Development

NETWORKING PATHWAY

C7183 PRINCIPLES OF COMPUTING NLPS

Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7180 INFORMATION TECHNOLOGY FUNDAMENTALS NLPS

Information Technology Fundamentals provides the necessary competencies required for an entry-level Information Technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Students will also learn appropriate customer support, understand the basics of virtualization, desktop imaging, and deployment. This course should also prepare students for the CompTia A+ Certification Exam.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7156 TECHNICAL SKILLS DEVELOPMENT

The Technical Skills Development course may be used to provide students with the opportunity to apply the technical knowledge and skills learned in a Concentrator A or B course through additional real world learning experiences such as lab activities, project based learning or a work-based learning experience. Students must be co-enrolled in a Concentrator A and/or B course in order to be enrolled in the Technical Skills Development course.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Concurrently enrolled in a Next Level Programs of Study Concentrator A and/or B course.
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum per program of study
- Counts as a directed elective or elective for all diplomas
- May be used by a student more than once as long as it is two separate programs of study.

N7182 NETWORKING FUNDAMENTALS NLPS

Networking Fundamentals describes, explores and demonstrates how a network operates in our everyday lives. The course covers the technical pieces and parts of a network and also societal implications such as security and data integrity. Using hands-on lab work, this course offers students the critical information needed for a role as an Information Technology professional who supports computer networks. Concepts covered include the TCP/IP model, OS administration, designing a network topology, configuring the TCP/IP protocols, managing network devices and clients, configuring routers and switches, wireless technology and troubleshooting. Provides students the ability to implement, administer, and troubleshoot information systems that incorporate the Microsoft Windows clients and servers in an enterprise environment. Students will be introduced to managing applications, files, folders, and devices in a windows active directory environment.

- Recommended Grade(s): 11, 12
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- Required Prerequisites: Principles of Computing; Information Technology Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**N7251 NETWORKING CAPSTONE NLPS**

Networking Capstone includes hands-on lab work, and a wide array of assessment types and tools. The course covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. The course also emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals; Networking Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas

**C5974 WORK BASED LEARNING CAPSTONE (WBL)**

Work Based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work Based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student’s work-based experiences and assist in evaluating achievement and performance. RelatedInstruction shall be organized and planned around the activities associated with the student’s individual job and career objectives in a pathway and shall be taught during the same semester the student is participating in the work-based experience. For a student to become employable, the related instruction should cover: (a) employability skills, and (b) specific occupational competencies.

- Recommended Grade: 12
- Required Prerequisites: Complete at least one advanced career and technical education course from a program or program of study. Worksite placement must align to the student pathway.  **CTE Director approval is required.**
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- A minimum of 85 hours of workplace and classroom activities are required for one credit; 170 hours are required for the two credits. Of the 85 or 170 hours, 18 to 36 hours (at least 1 hour a week or the equivalent over a semester or year) must be spent in related classroom instruction.
- Counts as a directed elective or elective for all diplomas

**SOFTWARE DEVELOPMENT PATHWAY**

**C5249 COMPUTER SCIENCE III: SOFTWARE DEVELOPMENT CAPSTONE**

Computer Science III: Software Development focuses on gaining knowledge and acquiring competencies in the processes, techniques and tools used to develop production quality software. The course framework aligns with professional standards and situates software development within the context of a software project, providing focus on requirements development and management, project scheduling, project success metrics, code design, development and review principles, testing procedures, release and revision processes, and project archival. An additional topic provides exposure to career opportunities within the software development field. The final product of this capstone experience is a working software product that adheres to industry standards.

- Recommended Grade: 12
- Required Prerequisites: Computer Science I
- Required Prerequisites: Computer Science II
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas
- Fulfills a science course requirement for all diplomas
- Qualifies as a quantitative reasoning course

**C7183 PRINCIPLES OF COMPUTING NLPS**
Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Recommended Grade(s): 10, 11
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7185 WEBSITE AND DATABASE DEVELOPMENT NLPS
Website and Database Development will provide students a basic understanding of the essential Web and Database skills and business practices that directly relate to Internet technologies used in Web site and Database design and development. Students will learn to develop Web sites using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS). Additionally students will be introduced to the basic concepts of databases including types of databases, general database environments, database design, normalization and development of tables, queries, reports, and applications. Students will be familiarized with the use of ANSI Standard Structured Query Language. Students will be introduced to data concepts such as data warehousing, data mining, and BIG Data. Students will develop a business application using database software such as Microsoft Access.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7184 SOFTWARE DEVELOPMENT NLPS
Software Development introduces students to concepts and practices of programming languages and software development. Students are introduced to algorithms and development tools used to document/implement computer logic. Discusses the history of software development, the different types of programming such as real time processing, web/database applications, and different program development environments. Concepts will be applied using different programming languages, and students will develop and test working programs in an integrated system.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7253 SOFTWARE DEVELOPMENT CAPSTONE NLPS
Software Development Capstone provides a basic understanding of the fundamental concepts involved when using an object oriented programming language. The emphasis is on logical program design using a modular approach involving task-oriented program functions. Object-oriented concepts such as methods, attributes, inheritance, exception handling, and polymorphism are utilized. Applications are developed using these concepts and include developing a graphical user interface, selecting forms and controls, assigning properties and writing code. Students will also build upon their web design experiences in previous courses by taking an in-depth look into client- and server-side scripting aspects including Java Script and PHP: hypertext preprocessor along with other scripting tools.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Website and Database Development; Software Development
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for all diplomas
In order to complete the IB DP Pathway, students must complete six two-year courses and IB Theory of Knowledge.

Pathways Offered:

International Baccalaureate (IB) Diploma Programme

I3032 IB BIOLOGY, HIGHER LEVEL
IB Biology Higher Level focuses on six core topics: cell biology, molecular biology, genetics, ecology, evolution/biodiversity, and human physiology. It is based on the curriculum published by the International Baccalaureate Organization. Students must complete additional study in eight topics: nucleic acids, metabolism, cell respiration, photosynthesis, genetics and evolution, animal physiology, and plant biology. Optional course topics for students include neurobiology and behavior, biotechnology and bioinformatics, ecology and conservations, and human physiology.

- Recommended Grade: 11, 12
- Required Prerequisites: Biology I and Chemistry I
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Qualifies as a quantitative reasoning course
- The minimum prescribed number of hours is 240

I3034 IB BIOLOGY, STANDARD LEVEL
IB Biology Standard Level focuses on six core topics: cell biology, molecular biology, genetics, ecology, evolution and biodiversity, and human physiology. It is based on the curriculum published by the International Baccalaureate Organization. Optional course topics include neurobiology and behavior, biotechnology and bioinformatics, ecology and conservations, and human physiology.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Biology I and Chemistry I
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills the Biology I requirement for all diplomas
• Qualifies as a quantitative reasoning course
• The minimum prescribed number of hours is 150.

I4582 IB BUSINESS AND MANAGEMENT, STANDARD LEVEL
The IB Business Management course is designed to develop students' knowledge and understanding of business management theories, as well as their ability to apply a range of tools and techniques. Students learn to analyze, discuss and evaluate business activities at local, national and international levels. The course covers a range of organizations from all sectors, as well as the sociocultural and economic contexts in which those organizations operate. The course covers the key characteristics of business organization and environment, and the business functions of human resource management, finance and accounts, marketing and operations management. Links between the topics are central to the course. Through the exploration of six underpinning concepts (change, culture, ethics, globalization, innovation and strategy), the course allows students to develop a holistic understanding of today's complex and dynamic business environment. The conceptual learning is firmly anchored in business management theories, tools and techniques and placed in the context of real world examples and case studies.

• Recommended Grade: 11, 12
• Required Prerequisites: none
• Recommended Prerequisites: none
• Credits: 2 or 4 semester course, 1 credit per semester
• Counts as an elective or directed elective for all diplomas

I3070 IB CHEMISTRY, HIGHER LEVEL
IB Chemistry Higher Level is designed to introduce students to the theories and practical techniques involved in the composition, characterization, and transformation of substances. It is based on the curriculum published by the International Baccalaureate Organization. As the central science, the chemical principles investigated underpin both the physical world in which we live and all biological systems. Students study eleven core topics: stoichiometry, atomic theory, periodicity, bonding, states of matter, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, and organic chemistry. Students must complete additional study in nine topics: atomic theory, periodicity, bonding, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, and organic chemistry. Optional course topics include medicines and drugs, human biochemistry, environmental chemistry, chemical industries, and fuels and energy. Additional options are modern analytical chemistry and further organic chemistry.

• Recommended Grade: 11, 12
• Required Prerequisites: none
• Recommended Prerequisites: Biology I and Chemistry I
• Credits: 2 or 4 semester course, 1 credit per semester
• Counts as an elective for all diplomas
• Fulfills a Chemistry I requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
• Qualifies as a quantitative reasoning course
• The minimum prescribed number of hours is 240.

I3072 IB CHEMISTRY, STANDARD LEVEL
IB Chemistry Standard Level is designed to introduce students to the theories and practical techniques involved in the composition, characterization, and transformation of substances. It is based on the curriculum published by the International Baccalaureate Organization. As the central science, the chemical principles investigated underpin both the physical world in which we live and all biological systems. Students study eleven core topics: stoichiometry, atomic theory, periodicity, bonding, states of matter, energetics, kinetics, equilibrium, acids and bases, oxidation and reduction, and organic chemistry. Optional course topics include medicines and drugs, human biochemistry, environmental chemistry, chemical industries, and fuels and energy. Higher physical organic chemistry is a further option.

• Recommended Grade: 11, 12
• Required Prerequisites: none
• Recommended Prerequisites: Biology I and Chemistry I
• Credits: 2 or 4 semester course, 1 credit per semester
• Counts as an elective for all diplomas
• Fulfills a Chemistry I requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
• Qualifies as a quantitative reasoning course
• The minimum prescribed number of hours is 150.
**I4144 IB DANCE, HIGHER LEVEL**
The IB DP Dance Higher Level course takes a holistic approach to dance, and embraces a variety of dance traditions and dance cultures—past, present, and looking towards the future. Performance, creative, and analytical skills are mutually developed and valued whether the students are writing papers or creating/performing dances. The curriculum provides students with a liberal arts orientation to dance. This orientation facilitates the development of students who may become choreographers, dance scholars, performers, or those, more broadly, who seek life enrichment through dance.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma
- Counts as a directed elective or elective for all diplomas

**I4148 IB DANCE, STANDARD LEVEL**
The IB DP Dance Standard Level course takes a holistic approach to dance and embraces a variety of dance traditions and dance cultures—past, present, and looking towards the future. Performance, creative, and analytical skills are mutually developed and valued whether the students are writing papers or creating/performing dances. The curriculum provides students with a liberal arts orientation to dance. This orientation facilitates the development of students who may become choreographers, dance scholars, performers, or those, more broadly, who seek life enrichment through dance.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma
- Counts as an elective or directed elective for all diplomas

**I3016 IB ENVIRONMENTAL SYSTEMS AND SOCIETIES, STANDARD LEVEL**
The IB DP Environmental Systems and Societies Standard Level course aims to provide students with a coherent perspective of the interrelationships between environmental systems and societies; one that enables them to adopt an informed personal response to the wide range of pressing environmental issues that they will inevitably come to face. Students’ attention is constantly drawn to their own relationship with their environment and the significance of choices and decisions that they make in their own lives. It is intended that students develop a sound understanding of the interrelationships between environmental systems and societies, rather than a purely journalistic appreciation of environmental issues. The teaching approach strives to be conducive to students evaluating the scientific, ethical, and socio-political aspects of issues.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a science elective for all diplomas
- Counts as an elective for all diplomas

**I1584 IB GEOGRAPHY, HIGHER LEVEL**
The IB Geography Higher Level course is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies, and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. Geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The DP geography course integrates both physical and human geography and ensures that students acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints, and ideas.

- Recommended Grade: 11, 12
- Required Prerequisites: none
I1586 IB GEOGRAPHY, STANDARD LEVEL
The IB Geography Standard Level course is a dynamic subject that is firmly grounded in the real world and focuses on the interactions between individuals, societies, and the physical environment in both time and space. It seeks to identify trends and patterns in these interactions and examines the processes behind them. Geography is distinctive in that it occupies the middle ground between social sciences and natural sciences. The DP geography course integrates both physical and human geography and ensures that students acquire elements of both scientific and socio-economic methodologies. Geography takes advantage of its position between both these groups of subjects to examine relevant concepts and ideas from a wide variety of disciplines. This helps students develop an appreciation of, and a respect for, alternative approaches, viewpoints, and ideas.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a Social Studies requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
- Counts as a Science Course requirement for the General and International Baccalaureate diplomas
- Counts as an elective for all diplomas

I1590 IB HISTORY, HIGHER LEVEL
The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social, and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance, and perspectives. The range of content is from 750 CE to the 21st Century. Higher Level requires that one of four regions must be studied: Americas, Africa/Middle East, Europe, or Asia/Oceania.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills the US History requirement only with regional concentration on the Americas

I1592 IB HISTORY, STANDARD LEVEL
The DP history course is a world history course based on a comparative and multi-perspective approach to history. It involves the study of a variety of types of history, including political, economic, social, and cultural, and provides a balance of structure and flexibility. The course emphasizes the importance of encouraging students to think historically and to develop historical skills as well as gaining factual knowledge. It puts a premium on developing the skills of critical thinking, and on developing an understanding of multiple interpretations of history. In this way, the course involves a challenging and demanding critical exploration of the past. Teachers explicitly teach thinking and research skills such as comprehension, text analysis, transfer, and use of primary sources. There are six key concepts that have particular prominence throughout the DP history course: change, continuity, causation, consequence, significance, and perspectives. The range of content is from 750 CE to the 21st century.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
I1136 IB LANGUAGE A: LANGUAGE AND LITERATURE, HIGHER LEVEL
The language A: language and literature higher level course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices, and to encourage students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. Helping students to focus closely on the language of studied texts and to become aware of the role of wider context in shaping meaning is central to the course. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills an English/Language Arts requirement for all diplomas
- New assessment in 2021

I1138 IB LANGUAGE A: LANGUAGE AND LITERATURE, STANDARD LEVEL
The language A: language and literature standard level course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices, and to encourage students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception. Helping students to focus closely on the language of studied texts and to become aware of the role of wider context in shaping meaning is central to the course. The study of literature in translation from other cultures is especially important to IB DP students because it contributes to a global perspective. Texts are chosen from a variety of sources, genres and media.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills an English/Language Arts requirement for all diplomas
- New assessment in 2022

I2588 IB MATHEMATICS: ANALYSIS AND APPROACHES, STANDARD LEVEL
The IB Mathematics: Analysis and Approaches course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. It is for students who enjoy developing mathematical arguments, problem solving, and exploring real and abstract applications, with and without technology. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Recommended Prerequisites: students should have strong Algebra II skills
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Mathematics course requirement for Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Qualifies as a quantitative reasoning course
- New assessment 2021
I2590 IB MATHEMATICS: ANALYSIS AND APPROACHES, HIGHER LEVEL
The IB Mathematics: Analysis and Approaches course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. It is for students who enjoy developing mathematical arguments, problem solving, and exploring real and abstract applications, with and without technology. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Recommended Prerequisites: students should have very strong Algebra II skills
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Mathematics course requirement for Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Qualifies as a quantitative reasoning course
- New assessment 2021

I2592 IB MATHEMATICS: APPLICATIONS AND INTERPRETATIONS, STANDARD LEVEL
The IB Mathematics: Applications and Interpretations course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models, and who enjoy the more practical side of mathematics. Core topics provide students the opportunity to engage in detailed study of numbers and algebra, functions, geometry and trigonometry, statistics and probability, and calculus.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: Recommended Prerequisites: students should have strong Algebra I skills
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Mathematics course requirement for Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diplomas
- Qualifies as a quantitative reasoning course
- New assessment 2021

I4212 IB MUSIC, HIGHER LEVEL
The IB Music Higher Level course seeks to develop students’ knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme Music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures, and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma

I4214 IB MUSIC, STANDARD LEVEL
The IB Music Standard Level course seeks to develop students’ knowledge and potential as musicians, both personally and collaboratively. IB Diploma Programme Music students are required to study musical perception and actively listen to a wide range of music from different parts of the world, musical cultures, and time periods. They also develop aural perception and understanding of music by learning about musical elements, including form and structure, notations, musical terminology, and context. Through the course of study, students become aware of how musicians work and communicate.

- Required Prerequisites: none
- Recommended Prerequisites: none
I3096 IB PHYSICS, HIGH LEVEL
IB Physics Higher Level is designed to introduce students to the laws of physics, the experimental skills required in physics, and the social and historical aspects of physics as an evolving body of human knowledge about nature. It is based on the curriculum published by the International Baccalaureate Organization. Students study six topics: physics and physical measurement, mechanics, thermal physics, waves, electricity and magnetism, and atomic and nuclear physics. Students must complete additional study in six topics: measurement and uncertainties, mechanics, thermal physics, wave phenomena, electromagnetism, and quantum and nuclear physics. Optional course topics from which the student may only choose two include biomedical physics, the history and development of physics, astrophysics, relativity, and optics.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Physics I requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
- Fulfills a Science Course requirement of the General and International Baccalaureate diplomas
- Qualifies as a quantitative reasoning course

I3098 IB PHYSICS PHYSICS, STANDARD LEVEL
IB Physics Standard Level is designed to introduce students to the laws of physics, the experimental skills required in physics, and the social and historical aspects of physics as an evolving body of human knowledge about nature. It is based on the curriculum published by the International Baccalaureate Organization. Students study six topics: physics and physical measurement, mechanics, thermal physics, waves, electricity and magnetism, and atomic and nuclear physics. Students must complete additional study in six topics: measurement and uncertainties, mechanics, thermal physics, wave phenomena, electromagnetism, and quantum and nuclear physics. Optional course topics from which the student may only choose two include biomedical physics, the history and development of physics, astrophysics, relativity, and optics. Further options would be mechanics extension, quantum physics, nuclear physics, and further energy.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as an elective for all diplomas
- Fulfills a Physics I requirement for the Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors
- Fulfills a Science Course requirement of the General and International Baccalaureate diplomas
- Qualifies as a quantitative reasoning course

I4262 THEATRE ARTS, HIGHER LEVEL
The IB Theatre Arts Higher Level course is multifaceted and gives students the opportunity to actively engage in theatre as creators, designers, directors, and performers. It emphasizes working both individually and collaboratively as part of an ensemble. The teacher’s role is to create opportunities that allow students to explore, learn, discover, and collaborate to become autonomous, informed, and skilled theatre-makers. Students learn to apply research and theory to inform and to contextualize their work. Through researching, creating, preparing, presenting, and critically reflecting on theatre, they gain a richer understanding of themselves, their community, and the world. Students experience the course from contrasting artistic and cultural perspectives. They learn about theatre from around the world, the importance of making theatre with integrity, and the impact that theatre can have on the world. It enables them to discover and engage with different forms of theatre across time, place, and culture, promoting international-mindedness and an appreciation of the diversity of theatre.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
I4264 IB THEATRE ARTS, STANDARD LEVEL
The IB Theatre Arts Standard Level course is multifaceted and gives students the opportunity to actively engage in theatre as creators, designers, directors, and performers. It emphasizes working both individually and collaboratively as part of an ensemble. The teacher’s role is to create opportunities that allow students to explore, learn, discover, and collaborate to become autonomous, informed, and skilled theatre-makers. Students learn to apply research and theory to inform and to contextualize their work. Through researching, creating, preparing, presenting, and critically reflecting on theatre, they gain a richer understanding of themselves, their community, and the world. Students experience the course from contrasting artistic and cultural perspectives. They learn about theatre from around the world, the importance of making theatre with integrity, and the impact that theatre can have on the world. It enables them to discover and engage with different forms of theatre across time, place, and culture, promoting international-mindedness and an appreciation of the diversity of theatre.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a directed elective for elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma
- New assessment 2023

I0560 IB THEORY OF KNOWLEDGE
IB Theory of Knowledge (TOK) is a course about critical thinking and inquiring into the process of knowing, rather than about learning a specific body of knowledge. It plays a special role in the DP by providing an opportunity for students to reflect on the nature of knowledge, to make connections between areas of knowledge, and to become aware of their own perspectives and those of the various groups whose knowledge they share. It is a core element undertaken by all DP students, and schools are required to devote at least 100 hours of class time to the course. The overall aim of TOK is to encourage students to formulate answers to the question “how do you know?” in a variety of contexts, and to see the value of that question. This allows students to develop an enduring fascination with the richness of knowledge.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a directed elective or elective all diplomas

I4090 IB VISUAL ARTS, HIGHER LEVEL
The IB Visual Arts Higher Level course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with, and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. The role of visual arts teachers should be to actively and carefully organize learning experiences for the students, directing their study to enable them to reach their potential, and satisfy the demands of the course. Students should be empowered to become autonomous, informed, and skilled visual artists.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma
I4092 IB VISUAL ARTS, STANDARD LEVEL
The IB Visual Arts Standard Level course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to further study of visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts. The role of visual arts teachers should be to actively and carefully organize learning experiences for the students, directing their study to enable them to reach their potential, and satisfy the demands of the course. Students should be empowered to become autonomous, informed, and skilled visual artists.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 with Academic Honors Diploma

I2306 IB WORLD LANGUAGE B, HIGHER LEVEL
The IB Language B Higher Level course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language. Language B is designed for students who possess a degree of knowledge and experience in the target language. Those learning a language B at higher level should be able to follow university courses in other disciplines in the language B that is studied.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a World Language credit for all diplomas
- Counts as an elective or directed elective for all diplomas
- In the Classical languages: new course assessment 2023

I2308 IB WORLD LANGUAGE B, STANDARD LEVEL
The IB language B Standard Level course provides students with the opportunity to acquire or develop an additional language and to promote an understanding of other cultures through the study of language. Language B is designed for students who possess a degree of knowledge and experience in the target language. High performing standard level students should be able to follow university courses in other disciplines in the language B that is studied.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a World Language credit for all diplomas
- Counts as an elective or directed elective for all diplomas
- In the Classical languages: new course assessment 2023

I2310 IB WORLD LANGUAGE AB INITIO, HIGHER LEVEL
The IB language ab initio Standard Level course is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. This process encourages the learner to go beyond the confines of the classroom, expanding an awareness of the world and fostering respect for cultural diversity. The language ab initio course develops students' linguistic abilities through the development of receptive, productive, and interactive skills by providing them with opportunities to respond and interact appropriately in a defined range of everyday situations.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Counts as a World Language credit for all diplomas
- Counts as an elective or directed elective for all diplomas
SHORTHRIDGE HIGH SCHOOL

Career-Related Programme (CP) Academy

In order for a student to complete a pathway within the CP Academy, students must complete the following: 2 IB Courses from the IB DP Academy above, 0553, 0554, and one career-related study in Communications, IT Operations, JROTC, or Visual and Performing Arts.

Pathways Offered:

Communications | Information Technology Operations
Junior Reserve Officer Training Corps (JROTC) | Visual and Performing Arts

I0553 IB PERSONAL AND PROFESSIONAL SKILLS I

IB Personal and Professional Skills (PPS) courses are a required component of the International Baccalaureate's Career-related program. Intended to develop attitudes, skills, and strategies applicable to both personal and professional situations, these courses emphasize personal growth and development, interpersonal skills, intercultural understanding, and the use of ethics. IB Personal and Professional Skills courses are linked to students’ career-related studies and may include work-based experiences.

- Recommended Grade: 11
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Fulfills a directed elective or elective requirement for all diplomas

I0554 IB PERSONAL AND PROFESSIONAL SKILLS II

IB Personal and Professional Skills (PPS) courses are a required component of the International Baccalaureate’s Career-related program. Intended to develop attitudes, skills, and strategies applicable to both personal and professional situations, these courses emphasize personal growth and development, interpersonal skills, intercultural understanding, and the use of ethics. IB Personal and Professional Skills courses are linked to students’ career-related studies and may include work-based experiences.

- Recommended Grade: 12
- Required Prerequisites: Approaches to Learning 1: Grade 11
- Recommended Prerequisites: none
- Credits: 2 or 4 semester course, 1 credit per semester
- Fulfills a directed elective or elective requirement for all diplomas

COMMUNICATIONS PATHWAY

N7140 PRINCIPLES OF DIGITAL DESIGN NLPS

Principles of Digital Design introduces students to fundamental design theory. Investigations into design theory and color dynamics will provide experiences in applying design theory, ideas and creative problem solving, critical peer evaluation, and presentation skills. Students will have the opportunity to apply the design theory through an understanding of basic photographic theory and technique. Topics will include image capture, processing, various output methods, and light.

- Recommended Grade(s): 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7141 DIGITAL DESIGN GRAPHICS NLPS

Digital Design Graphics will help students to understand and create the most common types of computer graphics used in visual communications. Skills are developed through work with professional vector-based and page layout software used in the industry. Additionally, students will be introduced to a full range of image input technology and manipulation including conventional photography, digital imaging, and computer scanners. Students will learn to communicate concepts and ideas through various imaging devices.

- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Digital Design
N7138 INTERACTIVE MEDIA AND DESIGN
Interactive Media Design focuses on the tools, strategies, and techniques for interactive design and emerging technologies, like web and social media. Students will learn the basics of planning, shooting, editing and post-producing video and sound. Additionally, students will explore the process of integrating text, graphics, audio and video for effective communication of information.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Digital Design; Digital Design Graphics
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7246 DIGITAL DESIGN CAPSTONE NLPS
The Digital Design Capstone course provides students the opportunity to dive deeper into advanced concepts of Visual Communication including user experience/user interface design, video production editing, animation and/or web design. Depending on the length of the course, students may focus their efforts on one area or explore multiple aspects.

- Recommended Grade(s): 12
- Required Prerequisites: Digital Design Concentrator Sequence
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semester required, 1-3 credits per semester, 6 credits max
- Counts as a Directed Elective or Elective for all diplomas

INFORMATION TECHNOLOGY OPERATIONS PATHWAY

C7183 PRINCIPLES OF COMPUTING NLPS
Principles of Computing provides students the opportunity to explore how computers can be used in a wide variety of settings. The course will begin by exploring trends of computing and the necessary skills to implement information systems. Topics include operating systems, database technology, cybersecurity, cloud implementations and other concepts associated with applying the principles of good information management to the organization. Students will also have the opportunity to utilize basic programming skills to develop scripts designed to solve problems. Students will learn about algorithms, logic development and flowcharting.

- Recommended Grade(s): 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: Introduction to Computer Science; Completed or Co-Enrolled in Algebra I
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7180 INFORMATION TECHNOLOGY FUNDAMENTALS NLPS
Information Technology Fundamentals provides the necessary competencies required for an entry-level Information Technology professional. Students will have the knowledge required to assemble components based on customer requirements, install, configure and maintain devices/software for end users, understand the basics of networking and security, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Students will also learn appropriate customer support, understand the basics of virtualization, desktop imaging, and deployment. This course should also prepare students for the CompTia A+ Certification Exam.

- Recommended Grade(s): 10, 11
- Required Prerequisites: Principles of Computing
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

N7181 NETWORKING AND CYBERSECURITY OPERATIONS NLPS
Advanced Information Technology will provide students with the fundamental concepts in networking and cybersecurity. Students are introduced to the principles and concepts of computer networking, covering the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students will be able to troubleshoot routers and switches and resolve common issues. The students will also explore the field of Cyber Security/Information Assurance focusing on the technical and managerial aspects of the discipline. Students will be introduced to the basic terminology, concepts,
and best practices of computer/network security and the roles and responsibilities of management/security personnel. The students will learn the technologies used and techniques involved in creating a secure computer networking environment including authentication and the types of attacks against an organization.

- Recommended Grade(s): 11, 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as a directed elective or elective for all diplomas

**N7249 IT OPERATIONS: CYBERSECURITY OPERATIONS CAPSTONE NLPS**
Cybersecurity Operations Capstone course introduces the core security concepts and skills needed to monitor, detect, analyze and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations. It emphasizes the practical application of the skills needed to maintain and ensure security operational readiness of secure networked systems through an in-depth coverage of network protocols and ethical hacking. Through hands-on instruction students will be prepared to interact with TCP/IP on the vast majority of networks in use today and learn threats and defense mechanisms. The skills developed in the curriculum prepares students for a career in the rapidly growing area of cybersecurity operations.

- Recommended Grade(s): 12
- Required Prerequisites: Principles of Computing; Information Technology Fundamentals; Networking and Cybersecurity Operations
- Recommended Prerequisites: none
- Counts as a Directed Elective or Elective for all diplomas

**JUNIOR RESERVE OFFICER TRAINING CORPS (JROTC) PATHWAY**

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Required Coursework</th>
<th>Advanced Coursework</th>
<th>Other electives (optional)</th>
<th>Culminating Work</th>
</tr>
</thead>
</table>
| JROTC   | -0516 LET 1         | 0516 LET 3 or 0516 LET 4 | -4582 IB Business and Management Standard Level | -JROTC LET portfolio
|         | -0516 LET 2         |                     |                           | -Showcase       |
|         | -1512 Current Problems, Issues, and Events |                     |                           |                 |

**VISUAL AND PERFORMING ARTS (VPA) PATHWAY**
<table>
<thead>
<tr>
<th>Pathway</th>
<th>Required Coursework</th>
<th>Advanced Coursework</th>
<th>Other electives (optional)</th>
<th>Culminating Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance</td>
<td>- 4146 Dance Performance 1</td>
<td>- 4146 Dance Performance 3 or 4144 IB Dance Higher Level</td>
<td>- 0518 Musical Theatre</td>
<td>- Butler JCA portfolio&lt;br&gt;- Showcase&lt;br&gt;The Spring Showcase will be planned, organized and executed by VPA students to encourage collaboration across the arts and to exercise arts administration skills from their business course.</td>
</tr>
<tr>
<td></td>
<td>- 4146 Dance Performance 2</td>
<td>4148 IB Dance Standard Level</td>
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<tr>
<td></td>
<td>- 4582 IB Business and Management Standard Level</td>
<td>4142 Dance, Choreography</td>
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<tr>
<td>Music</td>
<td>- Beginning Band/Choir/Orchestra/Piano</td>
<td>- Advanced Band/Choir/Orchestra/Piano or 4212 IB Music Higher Level</td>
<td>- 0518 Musical Theatre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Intermediate Band/Choir/Orchestra/Piano</td>
<td>Music Standard Level</td>
<td>4162 Instrumental Ensemble</td>
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<tr>
<td></td>
<td>- 4582 IB Business and Management Standard Level</td>
<td>4180 Chamber Choir</td>
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<tr>
<td>Theatre</td>
<td>- 4242 Theatre Arts or 4248 Theatre Production</td>
<td>4240 Advanced Theatre Yr 2 or 4264 IB Theatre Higher Level</td>
<td>- 0518 Musical Theatre</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 4240 Advanced Theatre Yr 1</td>
<td>4262 IB Theatre Standard Level</td>
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<tr>
<td></td>
<td>- 4582 IB Business and Management Standard Level</td>
<td>4240 Advanced Theatre Yr 2 or 4264 IB Theatre Higher Level</td>
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<tr>
<td>Visual Art</td>
<td>- 4000 Intro to 2D Art</td>
<td>- 4004 Advanced 2D Art Y1 and 4006 Advanced 3D Art Yr 1</td>
<td>- 0514 Advanced 2D Art Y2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 4002 Intro to 3D Art</td>
<td>- 4006 Advanced 3D Art Yr 1</td>
<td>- 0514 Advanced 3D Art Yr 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 4060 Drawing</td>
<td>- 4090 IB Visual Art Higher Level</td>
<td>- 7141 Digital Design</td>
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<td></td>
<td>- 4064 Painting</td>
<td>- 4092 IB Visual Art Standard Level</td>
<td>Graphics</td>
<td></td>
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<tr>
<td></td>
<td>- 4582 IB Business and Management Standard Level</td>
<td>4004 Advanced 2D Art Y2 or 4006 Advanced 3D Art Yr 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPLIED COURSES BY SUBJECT AREA

The Certificate of Completion (COC) provides a framework for a Free Appropriate Public Education (FAPE) to students receiving special education services who are not on a diploma path. The requirements for earning a Certificate of Completion can be acquired through any combination of applied units and credits accessing both the Academic Standards and Alternate Achievement Standards known as Content Connectors. A Certificate of Completion requires a minimum of 40 applied units or credits aligned to State-wide assessments (ILEARN and I AM).

*Please note that all general education course offerings are available to be taken as an applied unit. The applied course complies with the approved course description. General education course descriptions that do not have a corresponding applied course defined can be modified for the student with an IEP, and then the course would be reported as an applied unit.

The Case Conference Committee (CCC) should make the decision as to whether a student with a disability will earn a diploma or a certificate of completion (COC), and if a diploma, the type of diploma the student will earn. These decisions begin at least with the development of the transition IEP that will be in effect when the student enters 9th grade or becomes 14 years of age, whichever occurs first.

CAREER CLUSTER: ARTS, AV, TECH, AND COMMUNICATIONS

5232A APPLIED INTERACTIVE MEDIA
Applied Interactive Media prepares students for careers in business and industry working with interactive media products and services; which includes the entertainment industries. This course emphasizes the development and use of digitally generated or computer-enhanced products. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the “virtual workplace”.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum
- Counts as an elective or Employability requirement for the Certificate of Completion

CAREER CLUSTER: BUSINESS, MARKETING, AND ENTREPRENEURSHIP

4528A APPLIED DIGITAL APPLICATIONS AND RESPONSIBILITY
Applied 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 and may use highly specialized or individualized technology or 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 may be provided with the opportunity to seek industry-recognized digital literacy certifications.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits:
- Counts as an elective or Employability requirement for the Certificate of Completion

4540A APPLIED PERSONAL FINANCIAL RESPONSIBILITY
Applied Personal Financial Responsibility addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build and apply skills in financial literacy and responsible decision making. Content includes analyzing personal standards, needs, wants, and goals; identifying sources of income, and navigating technology for money management. A project based approach and applications through authentic settings such as work based observations, service learning experiences and community-based instruction are appropriate. Direct, concrete applications of basic mathematics proficiencies in projects are encouraged.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
5394A APPLIED PREPARING FOR COLLEGE AND CAREERS
Applied Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today’s choices on tomorrow’s possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members, planning and building employability skills; transferring school skills to life and work, and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana’s College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project-based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an elective or Employability for the Certificate of Completion

CAREER CLUSTER: EDUCATION AND TRAINING
5366A APPLIED HUMAN DEVELOPMENT AND WELLNESS
Applied Human Development and Wellness is valuable for all students as a life foundation and academic enrichment. Course content includes individuals’ physical, social, emotional, and moral development and wellness across the lifespan. Major topics include principles of human development and wellness; impacts of family on human development and wellness; factors that affect human development and wellness; practices that promote human development and wellness; managing resources and services related to human development and wellness; and career exploration in human development and wellness. Life events and contemporary issues addressed in this course include (but are not limited to) change; stress; abuse; personal safety; and relationships among lifestyle choices, health and wellness conditions, and diseases. A project or community-based approach that utilizes problem solving skills, communication, leadership, self-determination skills, and management processes is recommended in order to apply and generalize these skills in authentic settings.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 or 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

5330A APPLIED ADULTS ROLES AND RESPONSIBILITIES
Applied Adult Roles and Responsibilities is recommended for all students as life foundations and academic enrichment for students with interest in family and community services, personal and family finance, and similar areas. This course builds knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today’s society. The course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family resource management, and financial responsibility and resources. A project or community-based approach that utilizes problem solving skills, communication, leadership, self-determination skills, management processes, and fundamentals to college, career and community membership success. Service learning and other authentic applications are strongly recommended.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester, 1 credit maximum
- Counts as an elective or Employability Requirement for the Certificate of Completion

CAREER CLUSTER: FAMILY AND CONSUMER SCIENCES
5364A APPLIED INTERPERSONAL RELATIONSHIPS
Applied Interpersonal Relationships is an introductory course that is relevant for students interested in careers that involve interacting with people and for everyday life relationships. This course addresses knowledge and skills needed for positive and productive relationships in career, community, and family settings. Major course topics include communication skills; leadership, self-determination, teamwork, and
collaboration; conflict prevention, resolution, and management; building and maintaining relationships; and individual needs and characteristics and their impacts on relationships. A project or community-based approach is recommended in order to apply these topics of interpersonal relationships. This course provides a foundation for all careers and everyday life relationships that involve interacting with people both inside and outside of a business/organization, including team members, clients, patients, customers, the general public, family and friends.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 to 2 semester course, 1 credit per semester, 2 credits maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

5342A APPLIED NUTRITION AND WELLNESS
Applied Nutrition and Wellness is an introductory course valuable for all students as a life foundation and academic enrichment. This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, self-determination, and management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Direct, concrete mathematics and language arts proficiencies will be applied.

- Recommended Grade(s): 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 credit per semester, 1 credit maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

ENGLISH/LANGUAGE ARTS
1002A APPLIED ENGLISH 9
Applied English 9 is an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability-appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

1004A APPLIED ENGLISH 10
Applied English 10 an integrated English course based on the Indiana Content Connectors for English/Language Arts in Grades 9-10, is a study of language, literature, composition, and communication, focusing on literature and nonfiction within an appropriate level of complexity for each individual student. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to a variety of texts. Students form responses to literature, expository (informative), narrative, and argumentative/persuasive compositions, and research tasks when appropriate. Students deliver ability appropriate presentations with attention to audience and purpose and access, analyze, and evaluate online information.

- Recommended Grade: 9, 10
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

1006A APPLIED ENGLISH 11
Applied English 11, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an
1008A APPLIED ENGLISH 12
Applied English 12, an integrated English course based on the Indiana Content Connectors English/Language Arts in Grades 9-10 and applicable employability skills. This course is a study of language, literature, composition, and communication focusing on literature with an appropriate level of complexity for each individual student. Students analyze, compare, and evaluate a variety of classic and contemporary literature and nonfiction texts, including those of historical or cultural significance. Students write narratives, responses to literature, academic responses (e.g. analytical, persuasive, expository, summary), and research tasks when appropriate. Students analyze and create visual information in the form of pictures, graphs, charts, and tables. Students write and deliver grade-appropriate multimedia presentations and access online information.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 4 units maximum
- Counts as an English/Language Arts Requirement for the Certificate of Completion

1120A APPLIED DEVELOPMENTAL READING
Applied Developmental Reading is a supplemental course that provides students with individualized, specially designed instruction to support success in completing course work aligned with the Indiana Academic Standards or Content Connectors for English/Language Arts.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an elective for the Certificate of Completion

1076A APPLIED SPEECH
Applied Speech, a course based on the Indiana Academic Standards or Content Connectors for English/Language Arts, is the study and application of the basic principles and techniques of effective oral communication. Students deliver focused and coherent speeches that convey clear messages, using gestures, tone, and vocabulary appropriate to the audience and purpose. Students deliver different types of oral and/or multimedia presentations, including student portfolios, viewpoint, instructional, demonstration, informative, persuasive, and impromptu. Student products are aligned to their mode of communication.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an English/Language Arts or Employability Requirement for the Certificate of Completion

1090A APPLIED COMPOSITION
Applied Composition, a course based on the Indiana Academic Standards or Content Connectors for English/Language Arts, is a study and application of the rhetorical writing strategies of narration, description, exposition, and persuasion. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
1096A APPLIED TECHNICAL COMMUNICATIONS
Applied Technical Communication, a course based on the Indiana Academic Standards for English/Language Arts or Content Connectors for English/Language Arts, is the application of the processes and conventions needed for effective technical writing-communication. Using the writing process, students demonstrate a command of vocabulary, English language conventions, research and organizational skills, an awareness of the audience, the purpose for writing, and style. TECHNICAL WRITING PROJECT: Students complete a project, such as a multimedia presentation, proposal, or portfolio that demonstrates knowledge, application, and writing progress.

- Recommended Grade: 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an Employability Requirement or Capstone for the Certificate of Completion

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

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an elective or Health & Wellness requirement for the Certificate of Completion

3508A APPLIED CURRENT HEALTH ISSUES
Applied Current Health Issues, an elective course that can be aligned to Indiana’s Academic Standards for Health & Wellness, focuses on specific health issues and/or emerging trends in health and wellness, but not limited to: personal health and wellness; non-communicable and communicable diseases; nutrition; mental and emotional health; tobacco-prevention; alcohol and other drug-prevention; human development and family health; health care and/or medical treatments; and national and/or international health issues. This course provides students with the knowledge and skills of health and wellness core concepts, analyzing influences, access to information, interpersonal communication, decision-making and goal-setting skills, health-enhancing behaviors, and health and wellness advocacy skills.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an elective or Health & Wellness requirement for the Certificate of Completion

MATHEMATICS
2520A APPLIED ALGEBRA I
Applied Algebra I formalizes and extends the mathematics students learned in the middle grades. Algebra I is made up of five strands: Numbers Sense; Expressions and Computation; Linear Equations; Inequalities and Functions; Systems of Equations and Inequalities and Quadratic and Exponential Equations and Functions. The strands are further developed by focusing on the content of the Algebra content connectors.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
2516A APPLIED ALGEBRA I LAB
Applied Algebra I Lab is a mathematics support course. Algebra I Lab should be taken while students are concurrently enrolled in a math course or have met the math requirements for the certificate of completion. This course provides students with additional time to build the foundations necessary for high school math courses and work on specific, individualized math skills, while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas align with the critical areas of Math: Number Sense; Computation; Data Analysis; Geometry and Measurement; and Algebraic Thinking. Algebra I Lab combines standards from high school courses with foundational standards from the middle grades.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- 4 units maximum
- Fulfills an elective for the Certificate of Completion

2532A APPLIED GEOMETRY
Applied Geometry formalizes and extends students’ geometric experiences from the middle grades. These critical areas comprise the Geometry course: Points, Lines, Angles, and Planes; Triangles; Quadrilaterals and Other Polygons; Circles; Transformations; and Three-dimensional Solids. 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: 9, 10, 11, 12
- Required Prerequisites: none
- 4 units maximum
- Fulfills a Mathematics course requirement for the Certificate of Completion

2560A APPLIED MATHEMATICS LAB
Applied Mathematics Lab provides students with individualized instruction designed to increase math related competencies and/or mathematics coursework aligned with Indiana’s Academic Standards or Content Connectors for Mathematics.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- 4 units maximum
- Fulfills an elective course requirement for the Certificate of Completion

4512A APPLIED BUSINESS MATH
Applied Business Math is a 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 application of money management skills, navigating industry specific technology and apps, establishing and managing budgets, and maintaining inventory for products and other necessary skills that provides the foundation for students interested in careers in business related fields and everyday life. The content includes basic mathematical operations related to accounting, banking and finance, marketing, management, and retail. Instructional strategies should include simulations, guest speakers, tours, Internet research, and business experiences.

- Recommended Grade(s): 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits:
  - Counts as an elective for the Certificate of Completion
  - Fulfills a Mathematics requirement for the Certificate of Completion
  - Qualifies as a quantitative reasoning course

MULTI-DISCIPLINARY
0500A APPLIED BASIC SKILLS DEVELOPMENT
Applied Basic Skills Development is a multidisciplinary course that provides students continuing opportunities to develop basic skills including: (1) reading, (2) writing, (3) listening, (4) speaking, (5) mathematical computation, (6) note taking, (7) study and organizational skills, and (8) problem-solving skills, (9) employability skills, which are essential for high school achievement and post-secondary outcomes. Determination of the skills to be emphasized in this course is based on Indiana’s standards and Content Connectors, individual school corporation general curriculum plans, and the student’s Individualized Education Programs (IEP) or other individualized plans. Skills selected for developmental work provide students with the ability to continue to learn in a range of different life situations and may be applied using instructional practices related to community-based instruction.

- **Recommended Grade:** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Applied Units:** 8 units maximum
- **Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion**

0522A **APPLIED CAREER INFORMATION AND EXPLORATION**

Applied Career Information and Exploration provides students with opportunities to learn about themselves including interests, strengths and needed supports while exploring various traditional and nontraditional occupations and careers. Students develop skills in: (1) employability, (2) understanding the economic process, and (3) career decision making and planning. Opportunities are provided for students to observe and participate in various job situations through opportunities such as community-based instruction, internships, mock interviews, and guest speakers. Portfolio and resume development experience and career-related assessments may also be provided to students.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Applied Units:** 4 units maximum
- **Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion**

0512A **APPLIED ENVIRONMENTAL STUDIES**

Applied Environmental Studies provides students opportunities to utilize several disciplines in examining ecosystems from a variety of human viewpoints. This course fosters an awareness of aesthetics in urban and rural areas and the ecological, economic, social and political interdependence of environmental factors. It introduces students to the knowledge, attitudes, commitments, and skills needed to make decisions and to choose personal actions that will contribute to intelligent resource management. This course also provides students with the skills needed to investigate the ecological effects regarding the uses of: (1) energy, (2) water, (3) air, (4) soils, (5) minerals, (6) wildlife, and (7) other natural resources. Field trips and community investigations provide examples of practical applications of resource management. Topics include: (1) identifying and monitoring the disposal of hazardous wastes, (2) acid rain, (3) land-use practices ranging from wilderness areas to areas under multiple- use management, (4) water and solid waste treatment, (5) transportation systems, (6) human population demands on the land, and (7) the impact of these factors on the quality of life and the culture of the area.

- **Recommended Grade:** 9, 10, 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Applied Units:** 2 units maximum
- **Counts as an Employability Requirement or elective for all diplomas**

6162A **APPLIED INTERDISCIPLINARY COOPERATIVE EDUCATION (ICE)**

Applied Cooperative Education is an approach to employment training that spans all career and technical education program areas through school-based instruction and on the job training. Time allocations are a minimum of fifteen hours per week of on-the-job training and approximately five hours per week of school-based instruction, focused on employability skills development. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed.

- **Recommended Grade(s):** 11, 12
- **Required Prerequisites:** none
- **Recommended Prerequisites:** none
- **Credits:** 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- **Counts as an Employability Requirement or elective for the Certificate of Completion**

**MUSIC**

4200A **APPLIED MUSIC**
Applied Music is based on the Indiana Academic Standards for High School Choral or Instrumental Music. Applied Music offers high school students the opportunity to receive small group or private instruction designed to develop and refine performance skills. A variety of music methods and repertoire is utilized to refine students’ abilities in performing, creating, and responding to music.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1 credit per semester. The nature of this course allows for successive semesters of instruction at an advanced level provided that defined proficiencies and content standards are utilized.
- Counts as a directed elective or elective for all diplomas
- Fulfills a Fine Arts requirement for the Core 40 Academic Honors Diploma
- Laboratory course

PHYSICAL EDUCATION

3560A APPLIED ELECTIVE PHYSICAL EDUCATION

Applied Elective Physical Education, a course based on selected standards from Indiana’s Academic Standards for Physical Education, identifies what a student should know and be able to do as a result of a quality physical education program. The goal of a physically educated student is to maintain appropriate levels of cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition necessary for a healthy and productive life. Elective Physical Education promotes lifetime sport and recreational activities and provides an opportunity for an in-depth study in one or more specific areas. This course includes the study of physical development concepts and principles of sport and exercise as well as opportunities to develop or refine skills and attitudes that promote lifelong fitness. With staff support, students have the opportunity to design and develop an appropriate personal fitness program that enables them to achieve a desired level of fitness and includes self-monitoring. Ongoing assessment may include individual progress and/or performance-based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 8 units maximum
- Counts as an elective for Physical Education for the Certificate of Completion

3542A APPLIED PHYSICAL EDUCATION I

Applied Physical Education I focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in at least four of the following: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes individual progress and performance-based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as a Physical Education requirement for the Certificate of Completion

3544A APPLIED PHYSICAL EDUCATION II

Applied Physical Education II focuses on instructional strategies through a planned, sequential, and comprehensive physical education curriculum which provides students with opportunities to actively participate in four of the following areas that were not covered in Physical Education I: team sports; dual sport activities; individual physical activities; outdoor pursuits; self-defense and martial arts; aquatics; gymnastics; and dance, all which are within the framework of lifetime physical activities and fitness. Ongoing assessment includes individual progress and performance-based skill evaluation.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as a Physical Education requirement for the Certificate of Completion

SCIENCE

3024A APPLIED BIOLOGY I
Biology I is a course based on the following core topics: cellular structure and function, matter cycles and energy transfer; interdependence; inheritance and variation in traits; evolution. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by the Science and Engineering Practices (SEPS) and crosscutting concepts.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Fulfills as a science requirement for the Certificate of Completion

**3044A APPLIED EARTH SPACE SCIENCE**

Applied Earth and Space Science I is a course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation and experimentation using the Science and Engineering Practices and cross-cutting concepts.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Counts as an elective or science requirement for the Certificate of Completion

**3102A APPLIED PHYSICAL SCIENCE**

Applied Physical Science is a course in which students develop problem solving skills and strategies while performing laboratory and field investigations of fundamental chemical, physical, and related earth and space science concepts and principles that are related to students' interests and that address everyday problems.

- Recommended Grade: 9, 10, 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an elective or science requirement for the Certificate of Completion

**SOCIAL STUDIES**

**1508A APPLIED CITIZENSHIP AND CIVICS**

Applied Citizenship and Civics is an overview of citizenship roles and responsibilities designed to help students become independent thinkers and conscientious citizens. This course deals with political trends and behavior which citizens consider to be relevant to the most pressing issues of the day. The course provides students with experiences that will develop attitudes of citizenship within a democratic society. Topics include: (1) the policymaking process, (2) public participation in policymaking, (3) citizenship rights and responsibilities in a changing society, and (4) the relationship between modern society and government. Study of the local government should be a component of this course.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an elective, Employability or Social Studies Requirement for the Certificate of Completion

**1512A APPLIED CURRENT PROBLEMS, ISSUES, AND EVENTS**

Current Problems, Issues, and Events gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues. Students develop competence in (1) recognizing cause and effect relationships, (2) recognizing fallacies in reasoning and propaganda devices, (3) synthesizing knowledge into useful patterns, (4) stating and testing hypotheses, and (5) generalizing based on evidence. Problems or issues selected will have contemporary historical significance and will be studied from the viewpoint of the social science disciplines. Community service programs and internships within the community may be included.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
1514A APPLIED ECONOMICS
Applied Economics examines the allocation of resources and their uses for satisfying human needs and wants. The course identifies economic behaviors of consumers, producers, savers, investors, workers, voters, institutions, governments, and societies in making decisions. Students explain that because resources are limited, people must make choices and understand the role that supply, demand, prices, and profits play in a market economy. Key elements of the course include the study of scarcity and economic reasoning; supply and demand; market structures; the role of government; national economic performance; the role of financial institutions; economic stabilization; and trade. Students may be offered opportunities to better understand and apply course content through a variety of instructional strategies including project- and community-based instruction and real world experiences.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as a Social Studies Requirement or elective for the Certificate of Completion

1570A APPLIED GEOGRAPHY AND HISTORY OF THE WORLD
Applied Geography and History of the World is designed to enable students to use geographical tools, skills and historical concepts to apply their understanding of major global themes including the origin and spread of world religions; exploration; conquest, and imperialism; urbanization; and innovations and revolutions. Geographical and historical skills include forming research questions, acquiring information by investigating a variety sources, organizing information by creating graphic representations, analyzing information to understand, determine and explain patterns and trends, planning for the future, and documenting and presenting findings orally or in writing. Students use the knowledge, tools, and skills obtained from this course in order to understand, analyze, evaluate, and make predictions about major global developments. This course is designed to nurture perceptive and responsible citizenship, to encourage and support the development of critical thinking skills and lifelong learning, and to help prepare Indiana students for the 21st Century.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Counts as a Social Studies Requirement or elective for the Certificate of Completion

1518A APPLIED INDIANA STUDIES
Indiana Studies is an integrated course that compares and contrasts state and national developments in the areas of politics, economics, history, and culture. The course uses Indiana history as a basis for understanding current policies, practices, and state legislative procedures. It also includes the study of state and national constitutions from a historical perspective and as a current foundation of government. Examination of individual leaders and their roles in a democratic society will be included and student will examine the participation of citizens in the political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as a Social Studies Requirement or elective for the Certificate of Completion

- Must be offered at least once per school year

1538A APPLIED TOPICS IN HISTORY
Applied Topics in History provides students the opportunity to study specific historical eras, events, or concepts. Application of knowledge and development of historical research skills using primary and secondary sources is included. 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: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 2 units maximum
- Counts as a social studies requirement or elective for the Certificate of Completion
1550A APPLIED TOPICS IN SOCIAL SCIENCES
Applied Topics in Social Science provides students with an opportunity for in-depth study of a specific topic, theme, or concept in one of the social science disciplines such as anthropology, archaeology, economics, geography, political science, psychology, or sociology. It is also possible to focus the course on more than one discipline. Courses taught under this title should emphasize application of scientific methods of inquiry and help students develop effective research and thinking skills.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 2 units maximum
- Counts as a social studies requirement or elective for the Certificate of Completion

1540A APPLIED UNITED STATES GOVERNMENT
Applied United States Government provides a framework for understanding the purposes, principles, and practices of constitutional representative democracy in the United States. Responsible and effective participation of citizens is stressed. Students understand the nature of citizenship, politics, and governments; the rights and responsibilities of citizens; and how these are part of local, state, and national government. Students examine how the United States Constitution protects rights and provides the structure and functions of various levels of government. How the United States interacts with other nations and the government’s role in world affairs will be included. Using primary and secondary resources, students will articulate, evaluate, and defend positions on political issues. As a result, they will recognize their own impact, the role of individuals and groups in government, politics, and civic activities and the need for civic and political engagement of citizens in the United States.

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied units: 2 units maximum
- Counts as a social studies requirement or elective for the Certificate of Completion

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

- Recommended Grade: none
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 4 units maximum
- Counts as a Social Studies Requirement or elective for the Certificate of Completion

WORK-BASED LEARNING
5974A APPLIED WORK-BASED LEARNING CAPSTONE, MULTIPLE PATHWAYS
Applied Work Based Learning Capstone is an instructional strategy that can be implemented as a stand-alone course or a component of any CTE course that prepares students for college and career. This strategy builds individual students’ skills and knowledge within the area of interest. A standards based training plan is developed by the student, teacher, and workplace mentor to guide the student’s work based learning experiences and assist in evaluating progress and performance, whether WBL is a stand-alone course or a component of a discipline-specific CTE course.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 1 semester course, 1-3 credits per semester, 6 credits maximum
- Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion

6162A APPLIED COOPERATIVE EDUCATION
Applied Cooperative Education is an approach to employment training that spans all career and technical education program areas through school-based instruction and on-the-job training. Time allocations are a minimum of fifteen hours per week of on-the-job training and approximately five hours per week of school-based instruction, focused on employability skills development. Additionally, all state and federal laws and regulations related to student employment and cooperative education must be followed.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits: 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum
- Counts as an Employability Requirement or elective for the Certificate of Completion

**0530A APPLIED CAREER EXPLORATION INTERNSHIP**
The Applied Career Exploration Internship course is a paid or unpaid work experience in the public or private sector that provides for workplace learning in an area of student career interest. Unlike a cooperative education program in which students gain expertise in a specific occupation, the career exploration internship is intended to expose students to broad aspects of a particular industry or career cluster area by rotating through a variety of work sites or departments. In addition to their workplace learning activities, students participate in 1) regularly scheduled meetings with their classroom teacher, or 2) a regularly scheduled seminar with the teacher for the purpose of helping students make the connection between academic learning and their work-related experiences. Specific instructional standards tied to the career cluster or pathway and learning objectives for the internship must be written to clarify the expectations of all parties – the student, parent, employer, and instructor.

- Recommended Grade(s): 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Credits:
- Counts as an Employability Requirement or elective for the Certificate of Completion
- This course is exploratory in nature and, as such, does not qualify for reimbursement under the career and technical education funding formula.

**0524A APPLIED COMMUNITY SERVICE**
Applied Community Service is a course created by public law IC 20-30-14. Community service allows students in grades nine through twelve (HEA 1629) opportunity to earn up to two high school credits for completion of approved community service projects or volunteer service that “relates to a course in which the student is enrolled or intends to enroll.”

- Recommended Grade: 11, 12
- Required Prerequisites: none
- Recommended Prerequisites: none
- Applied Units: 2 units maximum
- Counts as an Employability Requirement, Capstone Course or elective for the Certificate of Completion