

# **NORTH DECATUR JR-SR HIGH SCHOOL**

## **Scheduling Guide**

**2024-2025**



# North Decatur Jr/Sr High School

## **Administrative Staff**

**Mrs. Debbie Reynolds, Principal**

**Mr. Nicholas Messer, Assistant Principal**

## **Guidance Staff**

**Mrs. Barb Lecher, School Counselor**

Counseling all students grades 7-12, last names beginning A-L

**Mrs. Jennifer Bowles, School Counselor**

Counseling all students grades 7-12, last names beginning M-Z

**Mrs. Diane Bedel**

Registrar & Guidance Secretary

*Dear Students and Parents,*

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

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

North Decatur Guidance Office

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## GENERAL SCHEDULING INFORMATION / DEADLINES

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

## **SCHEDULING RESOURCES**

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

**Learn More Indiana**

<http://www.learnmoreindiana.org>

**Indiana Career Explorer**

<http://www.indianacareerexplorer.org>

**The Occupational Outlook Handbook**

<http://www.bls.gov/ooh/>

**Indiana Department of Education**

<http://www.doe.in.gov>

**21<sup>st</sup> Century Scholars**

<http://scholars.in.gov>

**Ivy Tech Dual Credit**

<https://www.ivytech.edu/dual-credit/index.html>

**The College Board / PSAT / SAT**

<http://www.collegeboard.org>

**ACT**

<http://www.actstudent.org>

**NCAA Eligibility Center**

<http://www.eligibilitycenter.org>

## Graduation Pathways-Requirements beginning with the Class of 2023

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

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

1. A broad awareness of an engagement with individual career interests and associated career options
2. A strong foundation of academic and technical skills
3. Demonstrable employability skills that lead directly to meaningful opportunities for postsecondary education, training, and gainful employment. Students in the graduating class of 2023 must satisfy all three of the following Graduation Pathway Requirements by completing one of the associated PathwayOptions:

<u><b>Graduation Requirements</b></u>	<u><b>Graduation Pathway Options</b></u>
<p><b>1) High School Diploma</b></p>	<p>Meet the statutorily defined diploma credit and curricular requirements</p>
<p><b>2) Learn and Demonstrate Employability Skills</b> (Students must complete at least one of the following.)</p>	<p>Learn employability skills standards through locally developed programs. Employability skills are demonstrated by one of the following:</p> <ul style="list-style-type: none"> <li>• <b>Project-Based Learning Experience</b></li> <li>• <b>Service-Based Learning Experience</b></li> <li>• <b>Work-Based Learning Experience</b></li> </ul>
<p><b>3) Postsecondary-Ready Competencies</b> (Students must complete at least one of the following.)</p>	<ul style="list-style-type: none"> <li>• <b>Honors diploma:</b> Fulfill all requirements of either the Academic or Technical Honors Diploma</li> <li>• <b>ACT:</b> College-ready benchmarks</li> <li>• <b>SAT:</b> College-ready benchmarks</li> <li>• <b>ASVAB:</b> Earn at least a minimum AFQT score to qualify for placement into one of the branches of the US Military</li> <li>• <b>State- and Industry-recognized Credential or Certification</b></li> <li>• <b>Federally-recognized Apprenticeship</b></li> <li>• <b>Career-Technical Education Concentrator:</b> Must earn a C <u>average</u> or higher in at least 2 non-duplicative advanced courses within a particular program</li> <li>• <b>AP/Dual Credit:</b> Must earn a C <u>average</u> or higher in at least three courses</li> <li>• <b>Locally created pathway</b> that meets the framework from and earns the approval of the State Board of Education</li> </ul>

# NDHS Graduation Pathways Parent Checklist



## Decatur County Community Schools Graduation Pathway Checklist

Student Name: \_\_\_\_\_ Cohort: \_\_\_\_\_

*Students must complete all three Graduation Pathway Requirements*

Graduation Requirements	Graduation Pathway Options/Descriptions
<div style="text-align: center; font-size: 2em; font-weight: bold; margin-bottom: 5px;">1</div> <div style="text-align: center; font-weight: bold;">High School Diploma</div>	<p>Meet the State of Indiana requirements for a high school diploma:</p> <p> <input type="checkbox"/> General             <input type="checkbox"/> Core 40             <input type="checkbox"/> Academic Honors             <input type="checkbox"/> Technical Honors         </p>
<div style="text-align: center; font-size: 2em; font-weight: bold; margin-bottom: 5px;">2</div> <div style="text-align: center; font-weight: bold;">Learn &amp; Demonstrate Employability Skills</div> <p style="margin-top: 20px;">(Students must complete <u>at least one</u> of the following:)</p>	<p>Students must complete one of the following:</p> <p><input type="checkbox"/> <b>Project-Based Learning:</b> <i>Working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, finding resources, and applying information. Students often make work public by explaining, displaying, and/or presenting it to people beyond the classroom. This can include completion of a research project, completion of a course capstone, an AP Capstone Assessment, or another experience as approved by the State Board of Education.</i></p> <p>Description: _____</p> <p>Verification Product: _____</p> <p><input type="checkbox"/> <b>Service-Based Learning:</b> <i>Integrates meaningful service to enrich and apply academic knowledge, teach civic and personal responsibility, and strengthen communities. This can include participation in a meaningful volunteer or civic engagement experience, engagement in a school-based activity, such as a co-curricular or extracurricular activity or sport for at least one academic year (or season), or another experience as approved by the State Board of Education.</i></p> <p>Description: _____</p> <p>Verification Product: _____</p> <p><input type="checkbox"/> <b>Work-Based Learning:</b> <i>Reinforces academic, technical, and social skills learned in the classroom through collaborative activities with employer partners, allowing students to apply classroom theories to practical problems, explore career options, and pursue personal and professional goals. This can include completion of a course capstone, completion of an internship, obtaining the Governor's Work Ethic Certificate, employment outside of the school day, or another experience as approved by the State Board of Education.</i></p> <p>Description: _____</p> <p>Verification Product: _____</p>
<div style="text-align: center; font-size: 2em; font-weight: bold; margin-bottom: 5px;">3</div> <div style="text-align: center; font-weight: bold;">Postsecondary-Ready Competencies</div> <p style="margin-top: 20px;">(Students must complete <u>at least one</u> of the following:)</p>	<p><input type="checkbox"/> Honors Diploma:   <input type="checkbox"/> AHD   <input type="checkbox"/> THD</p> <p><input type="checkbox"/> ACT College Ready Benchmarks (18 in English or 22 in Reading and 22 in Math or 23 in Science)           English _____ or Reading _____ and Math _____ or Science _____</p> <p><input type="checkbox"/> SAT College Ready Benchmarks (480 EBRW, 530 Math)   EBRW _____ Math _____</p> <p><input type="checkbox"/> ASVAB (min score 31)   AFQT score: _____</p> <p><input type="checkbox"/> State/Industry Recognized Credential or Certification:   Certification _____</p> <p><input type="checkbox"/> CTE Concentrator ("C" average in at least 6 high school credits in career sequence)                                         CTE1 _____ CTE2 _____ CTE3 _____ CTE4 _____ CTE5 _____ CTE6 _____ CTE Course GPA _____</p> <p><input type="checkbox"/> AP/Dual Credit ("C" average in at least three course - at least one in core)                                         AP/DC1 _____ AP/DC2 _____ AP/DC3 _____ AP/DC GPA _____</p>

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Decatur County Community Schools

## “Bucket 2” Options

Student Name: \_\_\_\_\_ Cohort: \_\_\_\_\_

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

### 1 Project-Based Learning

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

PBL Activity/Product: \_\_\_\_\_

PBL Satisfied by DCCS Course: ☐ PLTW \_\_\_\_\_ ☐ SAE (year) \_\_\_\_\_

☐ C4 \_\_\_\_\_ ☐ Other: \_\_\_\_\_

Teacher Name: \_\_\_\_\_ Date: \_\_\_\_\_

### 2 Service-Based Learning

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

SBL Activity/Product: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### 3 Work-Based Learning

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

WBL Activity/Product: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

WBL Satisfied by: ☐ Governor's Work Ethic Certificate

☐ Employment Outside of School Day \_\_\_\_\_

☐ Other Experience Approved by SBOE \_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Decatur County Community Schools

## Athletic/Club/Extracurricular Verification Form

Student Name: \_\_\_\_\_

Cohort: \_\_\_\_\_

*This form must be completed in its entirety*

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

Sport/Club/Extracurricular Name: \_\_\_\_\_

Coach/Sponsor's Name: \_\_\_\_\_

Academic Year/Season of Participation: \_\_\_\_\_

Total Years of Involvement (grades 9-12): \_\_\_\_\_

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

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

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

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

Coach/Sponsor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### 2 Student Section (Please provide a reflection of your athletic/club experience)

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

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

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

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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





# Decatur County Community Schools

## Community Service Verification Form

Student Name: \_\_\_\_\_ Cohort: \_\_\_\_\_

*This form must be completed in its entirety*

### 1 Community Service Provider Section

Community or Volunteer Service Organization: \_\_\_\_\_

Supervisor's Name: \_\_\_\_\_

Company/Employer Address: \_\_\_\_\_

Company/Employer Phone #:(\_\_\_\_\_) \_\_\_\_\_

Date of the Community Service Activity: \_\_\_\_\_

Total # of Hours Served: \_\_\_\_\_

What Type of Community Service was Completed? \_\_\_\_\_

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

Supervisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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Please describe how our involvement benefited the community service organization.

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

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Decatur County Community Schools

## Employment Verification Form

Student Name: \_\_\_\_\_ Cohort: \_\_\_\_\_

*This form must be completed in its entirety*

### 1 Employer Section

Company/Employer Name: \_\_\_\_\_

Supervisor's Name: \_\_\_\_\_

Company/Employer Address: \_\_\_\_\_

Company/Employer Phone #: (\_\_\_\_) \_\_\_\_\_

Date Hired: \_\_\_\_\_ Leave Date (if applicable): \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Supervisor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### 2 Student Section

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Student Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Counselor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## CHOOSING A CURRICULUM

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

Core 40 (*40 credits*)

Core 40 with Academic Honors (*47 credits*)

Core 40 with Technical Honors (*47 credits*)

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

## THE OPT-OUT PROCESS

For some students, circumstances make completion of a Core 40 diploma unrealistic. If the decision is made to "opt-out" of Core 40, the student is required to complete the course and credit requirements for a general diploma, and the career/academic sequence the student will pursue is determined. This decision should not be made lightly, and the student and parent(s) must understand that, as a general rule, without a Core 40 diploma:

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

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

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

## DIPLOMA REQUIREMENTS

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

Schools may have additional local graduation requirements that apply to all students.

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

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



**with Technical Honors**

*(minimum 47 credits)*

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

## Indiana General High School Diploma

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

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

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

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

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

<b>College and Career Pathway Courses</b>	<b>6 credits</b> Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities.
<b>Flex Credits</b>	<b>5 credits</b>
	Flex Credits must come from one of the following: <ul style="list-style-type: none"> <li>• Additional elective courses in a College and Career Pathway</li> <li>• Courses involving workplace learning such as Cooperative Education or Internship courses</li> <li>• High school/college dual credit courses</li> <li>• Additional courses in Language Arts, Social Studies, Mathematics, Science, World Languages, or Fine Arts</li> </ul>
<b>Electives</b>	<b>6 credits</b> Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years.

**40 Total Credits Required**

**Schools may have additional local graduation requirements that apply to all students.**

**NDHS Graduation Pathways 2023 & 2024 Cohorts**

Cluster	Pathway Program Study	School	DOE Code	Concentrator Course A	DOE Code	Concentrator Course B
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<b>Agriculture</b>	Ag Power, Structure & Tech Systems	NDHS	5088	Ag Power, Structure, & Technology	5002	Agribusiness Management
	Animal Systems	NDHS	5070	ALS Animals	5002	Agribusiness Management
	Horticulture & Landscape	NDHS	5132	Horticultural Science	5136	Landscape Management I
	Plant Systems	NDHS	5074	ALS Plants & Soils	5002	Agribusiness Management
<b>Architecture &amp; Construction</b>	Construction	C4	5580	Construction Trades I	5578	Construction Trades II
	Electrical	C4	4830	Construction Trades: Electrical I	4832	Construction Trades: Electrical II
	Architectural Drafting & Design	C4	5640	Architectural Drafting & Design I	5652	Architectural Drafting & Design II
	Mechanical	C4	4836	Mechanical Drafting & Design I	4838	Mechanical Drafting & Design II
<b>Arts, AV Tech, &amp; Communication</b>	Interactive Media	C4	5232	Interactive Media	5550	Graphic Design & Layout
	Radio & TV	C4	5986	Radio & TV II	5992	Radio & TV II
	Graphic Imaging	C4	5232 or 5550	Interactive Media or Graphic Design & Layout	5572	Graphic Imaging Technology
<b>Education &amp; Training</b>	Education Careers	C4	5408	Education Professions I	5404	Education Professionals II
	Early Childhood	C4	5412	Early Childhood Education I	5406	Early Childhood Education II
<b>Health Sciences</b>	Biomed/Tech	SDHS	5216	PLTW Human Body Systems	5217	PLTW Medical Interventions
	Dental	C4	5203	Dental Careers I	5204	Dental Careers II
	Nursing	C4 or SDHS	5282	Health Science Education I	5284	Health Science Education II: Nursing
	Vet	C4	5211	Veterinary Careers I	5212	Veterinary Careers II
<b>Hospitality &amp; Human Services</b>	Cosmetology	C4	5802	Cosmetology I	5806	Cosmetology II
	Culinary Arts	C4	5440	Culinary Arts & Hospitality I	5346	Culinary Arts & Hospitality II: CA
	Hospitality Mgmt	C4	5440	Culinary Arts & Hospitality I	5458	Culinary Arts & Hospitality II: HM

<b>Information Tech</b>	Networking	C4	5234	Networking I	4588	Networking II: Infrastructure OR Servers
<b>Manufacturing &amp; Logistics</b>	Electronics	C4	5684	Electronics & Computer Technology I	5694	Electronics & Computer Technology II
	Robotics	C4	5610	Industrial Automation & Robotics I	5612	Industrial Automation & Robotics II
	Machine Tech	C4	5782	Precision Machining I	5784	Precision Machining II
	Welding	C4	5776	Welding Technology I	5778	Welding Technology II
<b>Public Safety</b>	Criminal Justice	C4	5822	Criminal Justice I	5824	Criminal Justice II
<b>STEM</b>	Engineering	NDHS	4814	PLTW Principles of Engineering	4820	PLTW Civil Engineering & Architecture <b>OR</b>
					4826	PLTW Digital Electronics
<b>Transportation</b>	Auto Tech	C4	5510	Automotive Services Technology I	5546	Automotive Services Technology II

<b>Locally Created Pathways</b>				
<b>Cluster</b>	<b>Pathway Program Study</b>	<b>School</b>	<b>Max Credits</b>	<b>Required Courses</b>
<b>Civic Arts</b>	Art	NDHS	2	Introduction to Business
		NDHS	1	Introduction to 2-D Art
		NDHS	1	Introduction to 3-D Art
		NDHS	2	Ceramics I
		NDHS	2	Drawing & Painting 1 & 2
		NDHS	6	Advanced 3-D Art
		NDHS	6	Advanced 2-D Art
	Band	NDHS	2	Introduction to Business
		NDHS	8	Concert Band
	Chorus	NDHS	2	Introduction to Business
		NDHS	8	Beginning Chorus



		NDHS	8	ND Singers
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### NDHS Next Level Pathways (NLP) Beginning with 2025 Cohort

Cluster	Principles Course	Concentrator Course A	Concentrator Course B	Capstone Course
<b>Agriscience - Animals Career Pathway</b>	Principles of Agriculture	Animal Science	ALS: Animals	Agribusiness Capstone
<b>Agriscience - Ag Mechanization &amp; Engineering Career Pathway</b>	Principles of Agriculture	Ag Power, Structure, & Technology (Ag Power I)	Ag Structures Fabrication (Ag Power II)	Ag Mechanization & Technology Capstone
<b>Agriscience - Foods Career Pathway</b>	Principles of Agriculture	Animal Science	ALS: Food Science	Agribusiness Capstone
<b>Agriscience - Landscaping Career Pathway</b>	Principles of Agriculture	Horticulture Science	Landscape & Turf Management	Agribusiness Capstone
<b>Engineering: Civil Engineering &amp; Architecture Career Pathway (NDHS)</b>	PLTW: Introduction to Engineering	PLTW: Principles of Engineering	PLTW: Civil Engineering & Architecture	Engineering Design & Development
<b>Engineering: Digital Electronics Career Pathway (NDHS)</b>	PLTW: Introduction to Engineering	PLTW: Principles of Engineering	PLTW: Digital Electronics	Engineering Design & Development
<b>STEM: Computer Science Career Pathway (NDHS)</b>	PLTW: Principles of Computing	Topics in Computer Science	Computer Science A	Cybersecurity Operations
<b>Biomedical Science Career Pathway (SDHS)</b>	PLTW: Principles of Biomedical Science	PLTW Human Body Systems	PLTW Biomedical Interventions	Biomedical Innovation
<b>Pre-Nursing Career Pathway (SDHS)</b>	Principles of Healthcare	Medical Terminology	Healthcare Specialist: CNA	Healthcare Specialist Capstone
<b>Business/Marketing Career Pathway (SDHS)</b>	Principles of Business Management	Management Fundamentals	Accounting Fundamentals	Business Administration Capstone
<b>Adv. Manufacturing: Industrial Maintenance</b>	Principles of Adv. Manufacturing	Adv. Manufacturing Technology	Industrial Maintenance Fundamentals	Industrial Maintenance Capstone

\*Principles course must be taken first or concurrently with Course A or B

\*\*This list does not include pathways that will be available through C4. Information regarding those pathways will be updated as it is available.

\*\*\*Additional pathways available at NDHS and SDHS are being explored and will be updated as it is available.

## QUANTITATIVE REASONING COURSES

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

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

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

*The following courses satisfy the quantitative reasoning requirement:*

### At North Decatur

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

### At C4 Columbus Area Career Connection

Architectural Drafting & Design II  
Mechanical Drafting & Design II  
Construction Trades II  
Construction Trades: Electrical II  
Electronics & Computer Technology II  
Industrial Automation & Robotics II  
Precision Machining I  
Precision Machining II

## DUAL CREDIT PRIORITY COURSE LIST

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

- Liberal Arts
- Career & Technical Education

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

## DUAL CREDIT COURSES

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

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

<b><u>High School Course</u></b>	<b><u>College Course</u></b>	<b><u>Credits</u></b>	<b><u>Priority Course List</u></b>
Agribusiness Management	AGRI 102	3	YES
Animal Science	AGRI 103	3	YES
Plant & Soil Science	AGRI 105	3	YES
Ag Power I & II	AGRI 106	3	YES
ALS, Animals	AGRI 107	3	YES
ALS, Plants & Soils	AGRI 109	3	YES
Natural Resources	AGRI 115	3	YES
Horticultural Science	AGRI 116	3	YES
Landscape Management I	AGRI 164	3	YES
Digital Apps & Responsibility	CINS 101	3	YES
Introduction to Business	BUSN 101	3	YES
Computers in Design & Production	DESN 101	3	YES
PLTW Intro to Eng Design	DESN 101/113	6	YES
PLTW Principles of Eng	DESN 104	3	YES
PLTW Civil Eng & Arch	DESN 105	3	YES
PLTW Digital Electronics	EECT 112	3	YES
Dual Credit English 12	ENGL 111/215	6	YES
College Speech (IU ACP)	SPCH S121	3	YES
Human Development & Wellness	HLHS 111	3	YES
Finite Mathematics	MATH 135	3	YES
Pre-Calculus	MATH 136	3	YES
Trigonometry	MATH 137	3	YES
AP Calculus AB	MATH 211	4	NO
AP Chemistry	CHEM 105	5	YES
AP Biology	BIOL 105	5	YES
Spanish III	SPAN 101/102	8	YES
Spanish IV	SPAN 201/202	6	YES
Health Careers: Nursing I ( SDHS)	HLHS 100	3	NO
Health Careers: Nursing II (SDHS)	HLHS 107	3	NO
Medical Terminology (SDHS)	HLHS 101	3	NO
Visual Communication	VISC 115/102	6	NO

***\*Available dual credit courses are subject to change. Dual credit is not guaranteed. Some courses have prerequisites and/or test scores required before Ivy Tech will award credit.***

***\*\*Numerous C4 courses are on the priority course list as well.***

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

**AP Courses Currently Available at North Decatur:**

AP US History	AP Calculus AB
AP Macroeconomics	AP Biology
AP Art History	AP Chemistry
AP Music Theory	AP American Literature & Composition
AP Computer Science	AP 2-D Art & Design

## WEIGHTED COURSES

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

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

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

For example:

<u>Student Earns</u>	<u>Standard Grade Points</u>	<u>Weighted Grade Points</u>
B-	2.667	3.667

## FOUR-YEAR PLAN

**Example Four Year Plan:**

## GRADE 9

### Semester 1 my

- 1) English 9
- 2) Algebra I (or Geometry if taken in 8th grade)
- 3) Biology
- 4) PE I
- 5) Spanish I (or II if taken in 8th grade)\*
- 6) World History
- 7) Pathway Course, Fine Arts, or Algebra Lab

### Semester 2

1. English 9
2. Algebra I (or Geometry if taken in 8th grade)
3. Biology
4. PE II
5. Spanish I (or II if taken in 8th grade)\*
6. World History
7. Pathway Course, Fine Arts, or Algebra Lab

## GRADE 10

### Semester 1

1. English 10
2. Geometry
3. Chemistry or ICP
4. Health
5. Spanish II\*
6. Pathway Course, Elective, or Fine Arts
7. Pathway Course, Elective, or Fine Arts

### Semester 2

1. English 10
2. Geometry
3. Chemistry or ICP
4. Preparing for College & Careers
5. Spanish II\*
6. Pathway Course, Elective, or Fine Arts
7. Pathway Course, Elective, or Fine Arts

## GRADE 11

### Semester 1

1. English 11 or AP American Lit. & Comp.
2. Algebra II
3. Core 40 Science Class
4. US History or AP US History
5. Spanish III\*
6. C4, Pathway Course, Elective, or Fine Arts
7. C4, Pathway Course, Elective, or Fine Arts

### Semester 2

1. English 11 or AP American Lit. & Comp.
2. Algebra II
3. Core 40 Science Class
4. US History or AP US History
5. Spanish III\*
6. C4, Pathway Course, Elective, or Fine Arts
7. C4, Pathway Course, Elective, or Fine Arts

## GRADE 12

### Semester 1

1. English 12 or Dual Credit English
2. Math (Finte, Bridge, Pre-Cal, Calculus) or QR
3. US Government
4. C4, Pathway Course, WBL, or Fine Arts
5. C4, Pathway Course, WBL, or Fine Arts
6. C4, Pathway Course, WBL, or Fine Arts
7. C4, Pathway Course, WBL, or Fine Arts

### Semester 2

1. English 12 or Dual Credit English
2. Math (Finte, Bridge, Pre-Cal, Calculus) or QR
3. Economics or AP Macroeconomics
4. C4, Pathway Course, WBL, or Fine Arts
5. C4, Pathway Course, WBL, or Fine Arts
6. C4, Pathway Course, WBL, or Fine Arts
7. C4, Pathway Course, WBL, or Fine Arts

\*Courses marked are not required for a Core 40 Diploma

## MASTER LIST OF COURSES

### AGRICULTURE

5228 Supervised Agricultural Experience

Summer

9-12

NDHS Scheduling Guide 21

5056 Introduction to Agriculture, Food, & Natural Resources	Year		8-12
7117 Principles of Agriculture	Year		8-12
5008 Animal Science / AGRI 103	Year	Dual Credit	9-12
5170 Plant and Soil Science / AGRI 105	Year	Dual Credit	9-12
5180 Natural Resources / AGRI 115	Year	Dual Credit	9-12
5132 Horticultural Science / AGRI 116	Year	Dual Credit	9-12
5088 Agriculture Power, Structure, and Technology I / AGRI 106	Year	Dual Credit	9-12
7112 Agriculture Structures Fabrication (Ag Power II) / AGRI 106	Year	Dual Credit	9-12
7115 Landscape & Turf Management I / AGRI 164	Year	Dual Credit	10-12
5002 Agribusiness Management / AGRI 102	Year	Dual Credit	10-12
5070 Advanced Life Science, Animals / AGRI 107	Year	Dual Credit	11-12
5074 Advanced Life Science, Plants and Soils / AGRI 109	Year	Dual Credit	11-12

## **BUSINESS MANAGEMENT, MARKETING, AND FINANCE**

4540 Personal Financial Responsibility	Semester		10-12
4524 Introduction to Accounting	Year	SDHS	10-12
4562 Principles of Business Management	Year	Dual Credit/SDHS	9-
12 7143 Management Fundamentals	Year	SDHS	10-12

## **INFORMATION TECHNOLOGY**

7183 Principles of Computing I	Year		9-12
7351 Topics in Computer Science II	Year		10-12
7352 AP Computer Science A III	Year	Weighted	11-12

## **ENGINEERING AND TECHNOLOGY / PLTW ENGINEERING**

4800 Computers in Design and Production / DESN 101	Year	Dual Credit	9-12
4802 PLTW Introduction to Engineering Design / DESN 101 & 113	Year	Dual Credit	9-12
5644 PLTW Principles of Engineering / DESN 104	Year	Dual Credit	10-12
5538 PLTW Digital Electronics / EECT 112	Year	DC/Weighted	11-12
5650 PLTW Civil Engineering and Architecture / DESN 105	Year	DC/Weighted	11-12

## **ENGLISH / LANGUAGE ARTS**

1002 English 9	Year		9
1004 English 10	Year		10
1006 English 11	Year		11
1058 AP English Literature & Composition	Year	Weighted	11
1008 English 12 /Technical Writing	Semester		12
1008 English 12/Film Literature	Semester		12
1124 Dual Credit English 12 / ENGL 111 & 215	Year	DC/Weighted	12
1086 Student Media (Newspaper/Yearbook)	Year		10-12
1078 Advanced Speech and Communication / SPCH S121	Semester	DC/Weighted	12
1084 Digital Media	Year		9-12
1092 Creative Writing	Semester		9-12

## **FAMILY AND CONSUMER SCIENCES**

5330 Adult Roles & Responsibilities	Semester		9-12
5364 Interpersonal Relationships	Semester		9-12
5366 Human Development and Wellness / HLHS 111	Semester	Dual Credit	9-12
5342 Nutrition and Wellness	Semester		9-12
5340 Advanced Nutrition and Wellness	Semester		9-12
5362 Child Development	Semester		10-12
5360 Advanced Child Development	Semester		10-12
5072 Advanced Life Science, Foods	Year		11-12
5394 Preparing for College and Careers	Semester		10

## **FINE ARTS**

### **Visual Arts**

4000 Introduction to Two-Dimensional Art	Semester 1		9-12
4002 Introduction to Three-Dimensional Art	Semester 2		9-12
4026 Survey of Art	Year		9-12

4086 Visual Communication / VISC 115 & 102	Year	Dual Credit	10-12
4025 AP Art History	Year	Weighted	11-12
4004 Advanced Two-Dimensional Art	Semester 1		11-12
4006 Advanced Three-Dimensional Art	Semester 2		11-12
4050 AP 2-D Art and Design	Year		11-

12

### **Music**

4170 Advanced Concert Band	Year		9-12
4162 Percussion Ensemble	Year		9-12
4182 Mixed Chorus (Concert Choir)	Year		9-12
4026 Survey of Music	Year		9-12
4186 Intermediate Chorus (Girls Choir)	Year		9-12
4188 Advanced Chorus (ND Singers)	Year		9-12
4200 Applied Music	Semester		9-12
4206 Music History and Appreciation	Semester		9-12
4210 AP Music Theory	Year	Weighted	11-12

## **HEALTH AND PHYSICAL EDUCATION**

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

## **MANUFACTURING**

7103 Advanced Manufacturing: Industrial Maintenance	Year		11-12
7108 Principles of Advanced Manufacturing	Year		11-
12			
7104 Industrial Maintenance Fundamentals	Year		
12			
7261 Industrial Maintenance Capstone	Year		
12			

## **MATHEMATICS**

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

## **MULTIDISCIPLINARY**

0520 Peer Tutoring	Semester		10-12
0532 College-Entrance Preparation	Semester		10-12
5974 Work-Based Learning	Year		12



0500 Leadership	Semester		10-12
0502 Cadet Teaching	Year		10-12
7161 Principles of Teaching	Year		9-
11			
0522 JAG	Year		
10			
0509 JAG	Year		11-
12			
<b>SCIENCE</b>			
3024 Biology I	Year		9-12
3108 Integrated Chemistry-Physics	Year		9-12
3064 Chemistry I	Year		10-12
3084 Physics I	Year		10-12
3060 AP Chemistry	Year	Weighted	11-12
3020 AP Biology	Year	Weighted	11-12
5276 Anatomy and Physiology	Year		11-12
3046 Earth & Space Science	Year		11-12
<b>HEALTH SCIENCES / PLTW BIOMEDICAL SCIENCES</b>			
5218 PLTW Principles of the Biomedical Sciences	Year 1	SDHS	9-12
5216 PLTW Human Body Systems	Year 2	SDHS	10-12
5217 PLTW Medical Interventions	Year 3	SDHS/Weighted	11-12
5219 PLTW Biomedical Innovations	Year 4	SDHS/Weighted	12
7168 Principles of Healthcare: Nursing	Year	SDHS/Dual Credit	10-12
5274 Medical Terminology	Semester	SDHS/Dual Credit	9-12
7166 Healthcare Specialist: CNA	Year	SDHS/Dual Credit	11-12
<b>SOCIAL STUDIES</b>			
1548 World History and Civilization	Year		9-10
1518 Indiana Studies	Semester		9-12
1516 Ethnic Studies	Semester		9-12
1542 United States History	Year		11
1562 AP United States History	Year	Weighted	11
1532 Psychology	Semester		11-12
1534 Sociology	Semester		11-12
1514 Economics	Semester		12
1564 AP Macroeconomics	Semester	Weighted	12
1540 United States Government	Semester		12
<b>WORLD LANGUAGES</b>			
2120 Spanish I	Year		9-12
2122 Spanish II	Year		9-12
2124 Spanish III / SPAN 101 & 102	Year	Dual Credit	10-12
2126 Spanish IV / SPAN 201 & 202	Year	DC/ghtedWei	11-12
2128 Spanish V	Year		12

## C4 COLUMBUS AREA CAREER CONNECTION

**Communications**

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

**Computer Technology**

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

**Construction Engineering Technology**

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

**Engineering Manufacturing Technology**

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

**Health Sciences**

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

**Human Services**

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

**Protective Services**

5822 Criminal Justice I  
 5824 Criminal Justice II

**Transportation**

5510 Auto Services Technology I  
 5546 Auto Services Technology II

<b>C4 Industry-Recognized Certifications</b>
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Automotive I	ASE Engine Repair, ASE Steering & Suspension
Automotive II	ASE Brakes, ASE Electrical
Cosmetology	Indiana State Board of Cosmetology
Construction I	NCCER Core
Construction II	NCCER Carpentry I
Culinary Arts I	ProStart National Certificate of Achievement
Culinary Arts II	ProStart National Certificate of Achievement, ServSafe Food Manager
Early Childhood Education I & II	Child Development Associate (CDA)
Welding I & II	AWS SENSE

## CAREER CLUSTER: AGRICULTURE

### SUPERVISED AGRICULTURAL EXPERIENCE

5228

9-12

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

### INTRODUCTION TO AGRICULTURE, FOOD, AND NATURAL RESOURCES

5056

8-12

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

### PRINCIPLES OF AGRICULTURE / AGRI 100 (IVY TECH)

7117

*Dual Credit Course - Grades 9-12 ONLY*

8-12

*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. This is YEAR ONE in all Agriculture Pathways. **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. Dual credit is only available for students in grades 9-12 per Ivy Tech policy.**

### ANIMAL SCIENCE / AGRI 103 (IVY TECH)

5008

*Dual Credit Course*

9-12

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

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

5170

*Dual Credit Course*

9-12

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

### NATURAL RESOURCES / AGRI 115 (IVY TECH)

5180

Dual Credit Course

9-12

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

### **HORTICULTURAL SCIENCE / AGRI 116 (IVY TECH)**

5132

Dual Credit Course

9-12

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

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

5088

Dual Credit Course

9-12

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

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

7112

Dual Credit Course

9-12

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

### **LANDSCAPE & TURF MANAGEMENT / AGRI 164 (IVY TECH)**

7115

Dual Credit Course

10-12

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

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

5002

Dual Credit Course

10-12

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

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

5070

Dual Credit Course

11-12

*Advanced Life Science, Animals* is a two-semester course that provides students with opportunities to participate in a variety of activities including laboratory work. Students investigate concepts that enable them to understand animal life and animal science as it pertains to agriculture. Through instruction, including laboratory, fieldwork,

leadership development, supervised agricultural experience, and the exploration of career opportunities, they will recognize concepts associated with animal taxonomy, life at the cellular level, organ systems, genetics, evolution, ecology, and historical and current issues in animal agriculture in the area of advanced life science, animals. **Students should complete both Biology I and Chemistry I before enrolling in this course. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.**

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

5074

*Dual Credit Course*

11-12

*Advanced Life Science, Plants and Soils* is a two-semester course that provides students with opportunities to participate in a variety of activities which include laboratory work. Students study concepts, principles, and theories associated with plants and soils. Students recognize how plants are classified, grown, function, and reproduce. Students explore plant genetics and the use of plants by humans. They examine plant evolution and the role of plants in ecology. Students investigate, through laboratory and fieldwork, how plants function and the influence of soil in plant life. **Students should complete both Biology I and Chemistry I before enrolling in this course. This course qualifies as a quantitative reasoning course and fulfills a science requirement for all diploma types.**

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

### **PRINCIPLES OF BUSINESS MANAGEMENT**

4562

*Dual Credit*

9-12

*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. This is YEAR ONE in the Business Pathway. **Offered at SDHS**

### **ACCOUNTING FUNDAMENTALS**

4524

10-12

*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 decision-making. **Offered at SDHS**

### **MANAGEMENT FUNDAMENTALS**

7143

10-12

*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. **Offered at SDHS**

## **CAREER CLUSTER: CTE**

### **PREPARING FOR COLLEGE AND CAREERS**

5394

10

*Preparing for College and Careers* addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher-order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building

employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project-based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences is incorporated.

## PERSONAL FINANCIAL RESPONSIBILITY

4540

10-12

*Personal Financial Responsibility* addresses the identification and management of personal financial resources to meet the financial needs and wants of individuals and families, considering a broad range of economic, social, cultural, technological, environmental, and maintenance factors. This course helps students build skills in financial responsibility and decision-making; analyzing personal standards, needs, wants, and goals; identifying sources of income, saving, and investing; understanding banking, budgeting, and record-keeping; and managing risk, insurance, and credit card debt. A project-based approach and applications through authentic settings such as work-based observations and service learning experiences are appropriate. Direct, concrete applications of mathematical proficiencies in projects are encouraged. **This course qualifies as a quantitative reasoning course. Offered at SDHS**

## CAREER CLUSTER: STEM

### PLTW INTRODUCTION TO ENGINEERING DESIGN / DESN 101 & 113 (IVY TECH)

4802

*Dual Credit Course*

9-12

*PLTW Introduction to Engineering Design* is a year-long introductory course which develops student problem-solving skills using the design process. Students document the progress of their solutions as they move through the design process. Students develop solutions using elements of design and manufacturability concepts. They develop hand sketches using 2-D and 3-D drawing techniques and incorporate computer-aided design (CAD) in the development of their solutions. This is YEAR ONE in the Engineering Pathway. **Students who have successfully completed Algebra I or who have earned a passing score on their 8th grade ISTEP+ Math are recommended for this course.**

### PLTW PRINCIPLES OF ENGINEERING / DESN 104 (IVY TECH)

5644

*Dual Credit Course*

10-12

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

### PLTW DIGITAL ELECTRONICS / EECT 112 (IVY TECH)

5538

*Dual Credit and Weighted Course*

11-12

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

### PLTW CIVIL ENGINEERING AND ARCHITECTURE / DESN 105 (IVY TECH)

5650

*Dual Credit and Weighted Course*

11-12

*PLTW Civil Engineering and Architecture* is a year-long course that introduces students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles

will be used in conjunction with mathematical and scientific knowledge. Computer software programs will allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis will be placed on related transportation, water resource, and environmental issues. Activities will include the preparation of cost estimates, as well as a review of regulatory procedures that would affect the project design. **This course qualifies as a quantitative reasoning course.**

## CAREER CLUSTER: INFORMATION TECHNOLOGY

### PRINCIPLES OF COMPUTING I

7183

9-12

*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. This year YEAR ONE in the Computer Science Pathway.

### TOPICS IN COMPUTER SCIENCE II

7351

10-12

*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. **Required Prerequisites:** Principles of Computing Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas • Counts as a quantitative reasoning course • Counts as a science credit

### AP COMPUTER SCIENCE A III

7352

10-12

*AP Computer Science A* 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. **Required Prerequisites:** Principles of Computing Credits: 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas • Counts as a science credit • Counts as a quantitative reasoning course • The AP Computer Science A curriculum may be used to complete the competencies required for this course.

## ENGLISH / LANGUAGE ARTS

### ENGLISH 9

1002

9

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

### ENGLISH 10

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

## ENGLISH 11

*English 11*, an integrated English course, is a study of language, literature, composition, and oral communication with a focus on exploring characterization across universal themes and a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 11 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

## 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.

## ENGLISH 12

*English 12*, an integrated English course, is a study of language, literature, composition, and oral communication focusing on an exploration of point of view or perspective across a wide variety of genres. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance for Grade 12 in classic and contemporary literature balanced with nonfiction. Students write fictional narratives, short stories, responses to literature, reflective compositions, historical investigation reports, resumes, and technical documents incorporating visual information in the form of pictures, graphs, and tables. Students write and deliver grade-appropriate multimedia presentations and access, analyze, and evaluate online information.

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

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

## FILM LITERATURE

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



## STUDENT MEDIA (Newspaper/Yearbook)

1086

10-12

*Student Media* is a course in the study of journalism. Students demonstrate their ability to do journalistic writing and design for high school media, including school newspapers and yearbooks, and a variety of media formats. Students follow the ethical principles and legal boundaries that guide scholastic journalism. Students express themselves publicly with meaning and clarity for the purpose of informing, entertaining, or persuading. Students work on high school media staff so that they may prepare themselves for career paths in journalism, communications, writing, or related fields. **This course fulfills the fine arts requirement for the Academic Honors Diploma. Selling ads for both the newspaper and yearbook are required.**

## ADVANCED SPEECH AND COMMUNICATION / SPCH S121 (IU ACP)

10

*Dual Credit and Weighted Course*

11-12

*Advanced Speech and Communication* is the study and application of skills in listening, oral interpretation, media communications, research methods, and oral debate. Students deliver different types of oral and multi-media presentations, including speeches to inform, to motivate, to entertain, and to persuade through the use of impromptu, extemporaneous, memorized, or manuscript delivery. **2.6 GPA required to earn dual credit. There is a \$75 course fee and additional online book rental billed to parents from ACP IU for this course.**

## DIGITAL MEDIA (VIDEO ANNOUNCEMENTS)

1084

9-12

*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 social responsibility. 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.

## CREATIVE WRITING

1092

11-12

*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.

## CAREER CLUSTER: FAMILY AND CONSUMER SCIENCES/CTE

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

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

## ADULT ROLES & RESPONSIBILITIES

5330

9-12

*Adult Roles and Responsibilities* is recommended for all students as life foundations and academic enrichment, and as a career sequence course for students with an interest in family and community services, personal and family finance, and similar areas. This course builds knowledge, skills, attitudes, and behaviors that students will need as they complete high school and prepare to take the next steps toward adulthood in today's society. The

course includes the study of interpersonal standards, lifespan roles and responsibilities, individual and family resource management, and financial responsibility and resources. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of adult roles and responsibilities. Direct, concrete mathematics and language arts proficiencies will be applied. Service learning and other authentic applications are strongly recommended. This course provides the foundation for continuing and post-secondary education in all career areas related to individual and family life.

## INTERPERSONAL RELATIONSHIPS

5364

9-12

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

## HUMAN DEVELOPMENT AND WELLNESS / HLHS 111 (IVY TECH)

5366

*Dual Credit Course*

9-12

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

## NUTRITION AND WELLNESS

5342

9-12

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

## ADVANCED NUTRITION AND WELLNESS

5340

9-12

*Advanced Nutrition and Wellness* is a course which provides an extensive study of nutrition. This course is recommended for all students wanting to improve their nutrition and learn how nutrition affects the body across the lifespan. *Advanced Nutrition and Wellness* is an especially appropriate course for students interested in careers in the medical field, athletic training, and dietetics. This course builds on the foundation established in *Nutrition and Wellness*, which is a required prerequisite. This is a project-based course utilizing higher-order thinking, communication, leadership, and management processes. Topics include extensive study of major nutrients,

nutritional standards across the lifespan, influences on nutrition/food choices, technological and scientific influences, and career exploration in this field. Laboratory experiences will be utilized to develop food handling and preparation skills. Attention will be given to nutrition, food safety, and sanitation. This course is the second in a sequence of courses that provide a foundation for continuing and post-secondary education in all career areas related to nutrition, food, and wellness.

## CHILD DEVELOPMENT

5362

10-12

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

## ADVANCED CHILD DEVELOPMENT

5360

10-12

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

## ADVANCED LIFE SCIENCE, FOODS

5072

11-12

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

## FINE ARTS

### Visual Arts Courses

#### INTRODUCTION TO TWO-DIMENSIONAL ART

4000

9-12

*Introduction to Two-Dimensional Art* is a semester one course based on the Indiana Academic Standards for Visual Art. Students taking this course engage in sequential learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studies and lead to the creation of portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their

work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources.

## INTRODUCTION TO THREE-DIMENSIONAL ART

4002

9-12

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

## SURVEY OF ART

4026

9-12

*Fine Arts Connections (FN ART CONN)* Fine Arts Connections is a course based on the Indiana Academic Standards for Visual Art, Music, Theater, 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

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

4086

*Dual Credit Course*

10-12

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

## AP ART HISTORY

4025

*Weighted Course*

11-12

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

## ADVANCED TWO-DIMENSIONAL ART

4004

11-12

*Advanced Two-Dimensional Art* is a semester one course for advanced students based on the Indiana Academic Standards for Visual Art. Students in this course build on the sequential learning experiences of Introduction to Two-Dimensional Art that encompass art history, art criticism, aesthetics, and production and lead to the creation of

portfolio quality works. Students explore historical and cultural background and connections; analyze, interpret, theorize, and make informed judgments about artwork and the nature of art; create two-dimensional works of art, reflect upon the outcomes, and revise their work; relate art to other disciplines and discover opportunities for integration; and incorporate literacy and presentational skills. They identify ways to utilize and support art museums, galleries, studios, and community resources. **Students must pass Intro to 2-D/3-D Art, Drawing, and Painting or be recommended by the teacher before enrolling in this course. Independent work will be required.**

### ADVANCED THREE-DIMENSIONAL ART

4006

11-12

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

### AP 2-D ART AND DESIGN

4050

11-12

AP 2-D Art and Design (ART 2D AP) 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 Program offers three studio art courses and portfolios: 2-Dimensional Design, 3-Dimensional Design, and Drawing. The AP Art portfolios are designed for students who are seriously interested in the practical experience of art. The portfolios correspond to most college foundation courses. Students submit portfolios for evaluation at the end of the school year. Students may choose to submit any or all of the Drawing, 2-Dimensional Design, or 3-Dimensional design portfolios. AP Art students create a portfolio of work to 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

### Music Courses

#### ADVANCED CONCERT BAND

4170

9-12

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

#### PERCUSSION ENSEMBLE

4162

9-12

*Percussion Ensemble* is based on the Indiana Academic Standards for High School Instrumental Music. Students taking this course are provided with a balanced comprehensive study of percussion ensemble and solo literature, which develops skills in the psychomotor, cognitive and affective domains. Students develop and refine elements

of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature as pertaining to percussion ensemble and solo literature, and integration of other applicable disciplines. Experiences include improvising, conducting, playing by ear, and sight-reading. Students develop the ability to understand and convey the composer's intent in performance of music. Time outside of the school day may be scheduled for rehearsals and performances. **Students are required to participate in performance opportunities outside of the school day that support and extend learning in the classroom.**

### MIXED CHORUS (Concert Choir)

4182

9-12

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

### INTERMEDIATE CHORUS (Girls Choir)

4186

9-12

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

### ADVANCED CHORUS (ND Singers)

4188

9-12

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

### SURVEY OF MUSIC

4026

9-12

Fine Arts Connections (FN ART CONN) Fine Arts Connections is a course based on the Indiana Academic Standards for Visual Art, Music, Theater, 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

## APPLIED MUSIC

4200

9-12

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

## MUSIC HISTORY AND APPRECIATION

4206

9-12

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

## AP MUSIC THEORY

4210

*Weighted Course*

11-12

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

# HEALTH AND PHYSICAL EDUCATION

## PHYSICAL EDUCATION I

3542

9

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

## PHYSICAL EDUCATION II

3544

9

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

## HEALTH AND WELLNESS EDUCATION

3506

10

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

## ELECTIVE PHYSICAL EDUCATION - CONDITIONING

3560

10-12

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

## ELECTIVE PHYSICAL EDUCATION - TEAM SPORTS

3560

10-12

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

# MANUFACTURING

7103

## ADVANCED MANUFACTURING TECHNOLOGY

11-12

Advanced Manufacturing Technology ADV MFG TECH Advanced Manufacturing Technology introduces students to a variety of manufacturing processes and procedures that are used in real-world manufacturing environments. The course covers key electrical principles, (including current, voltage, resistance, power, inductance, capacitance, and transformers), as well as the basic principles of mechanical and fluid power. Additional course topics include, types of production, production materials, machining and tooling, manufacturing planning, production control, and product distribution. Students will be expected to understand the product life cycle from conception through distribution. This course also focuses on technologies used in production processes such as basic power systems, energy transfer systems, and machine operation. The course utilizes a combination of lecture, lab, online simulation, and programming to prepare students for Certified Production Technician Testing through Manufacturing Skill Standards Council (MSSC). • Required Prerequisites: Principles of Advanced Manufacturing • Recommended Prerequisites: None • 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas



Principles of Advanced Manufacturing PRIN ADV MFG Principles of Advanced Manufacturing includes classroom and laboratory experiences, which are focused on industrial technology and manufacturing trends. Covered topics include safety and impact, manufacturing essentials, lean manufacturing, design principles, and careers in advanced manufacturing. Students participate in hands-on projects and team activities to learn necessary skills while using the latest industry technologies. Work-based learning experiences and industry partnerships are highly encouraged for an authentic industry experience. • Recommended Grade(s): 9, 10, 11 • Required Prerequisites: None • Recommended Prerequisites: Introduction to Advanced Manufacturing • 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas

## INDUSTRIAL MAINTENANCE FUNDAMENTALS

Industrial Maintenance Fundamentals IND MAINT FUN Industrial Maintenance Fundamentals introduces students to fundamental Welding and Machining skills. Students will be introduced to basic skills in welding, cutting and brazing, and machine tooling that are applicable in a wide variety of trade professions. Specifically, students will learn safe practices in oxy-fuel and Arc welding processes along with experience in using turning, milling, and grinding applications. • Required Prerequisites: Principles of Advanced Manufacturing; Advanced Manufacturing Technology • Recommended Prerequisites: None • 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas

## INDUSTRIAL MAINTENANCE CAPSTONE

Industrial Maintenance Capstone IND MAINT CAP The Industrial Maintenance Capstone examines the procedures for the removal, repair, and installation of machine components. The methods of installation, lubrication practices, and maintenance procedures for industrial machinery are analyzed. Additionally the course may cover the mechanical components and electrical drives in a complex mechatronic system. By understanding the inner workings of 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 be discussed. This course will use lecture, lab, online simulation and programming to prepare students for C-210 Mechanical Power Systems I Certification through Smart Automation Certification Alliance (SACA). • Required Prerequisites: Principles of Advanced Manufacturing; Advanced Manufacturing Technology; Industrial Maintenance Fundamentals • Recommended Prerequisites: None • 2 semester course, 2 semesters required, 1-3 credits per semester, 6 credits maximum • Counts as a Directed Elective or Elective for all diplomas • Counts as a quantitative reasoning course

<b>MATHEMATICS</b>
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**ALGEBRA I LAB**

*Algebra I Lab* is a mathematics support course for Algebra I. The course provides students with additional time to build the foundations necessary for high school math courses while concurrently having access to rigorous, grade-level appropriate courses. The five critical areas of Algebra I Lab align with the critical areas of Algebra I: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. However, whereas Algebra I contains exclusively grade-level content, Algebra I Lab combines standards from high school courses with foundational standards from the middle grades. **This course is designed as a support course for Algebra I. As such, a student taking Algebra I Lab must also be enrolled in Algebra I during the same academic year. This course fulfills a mathematics requirement for the General Diploma only.**

**ALGEBRA I**

*Algebra I* formalizes and extends the mathematics students learned in the middle grades. Five critical areas comprise Algebra I: relations and functions, linear equations and inequalities, quadratic and nonlinear equations, systems of equations and inequalities, and polynomial expressions. The critical areas deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using quadratic

functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. **Students who do not pass both semesters of Algebra I with a C- or better will be required to take both Algebra I and Math 10 the following year.**

## GEOMETRY

2532

9-12

*Geometry* formalizes and extends students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Six critical areas comprise the Geometry course: congruency and similarity, measurement, analytic geometry, circles, and polyhedra. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school INCC. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

## ALGEBRA II

2522

10-12

*Algebra II* builds on work with linear, quadratic, and exponential functions and allows for students to extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

## FINITE MATHEMATICS / MATH 135 (IVY TECH)

2530

*Dual Credit Course*

11-12

*Finite Mathematics* is an umbrella of mathematical topics. It is a course designed for students who will undertake higher-level mathematics in college that may not include calculus. Finite Mathematics is made up of five strands: sets, matrices, networks, optimization, and probability. The eight process strands for mathematics apply throughout the course. Together with the content standards, the process standards prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. **Students must meet prerequisite testing scores in mathematics to qualify for the dual credit in this course.**

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

2564

*Dual Credit Course*

11-12

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

## TRIGONOMETRY / MATH 137 (IVY TECH)

2566

*Dual Credit Course*

11-12

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

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

2562

*Dual Credit and Weighted Course*

12

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

## CCR BRIDGE: MATH READY

2514

12

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

## PROBABILITY AND STATISTICS

2546

11-12

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.

## QUANTITATIVE REASONING

2550

11-12

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.

## AP STATISTICS

2570

11-12

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.

## MULTIDISCIPLINARY

### BASIC SKILLS DEVELOPMENT

0500

9-12

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

### PEER TUTORING

0520

10-12

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

### LEADERSHIP

0500

9-12

*Leadership* will enable the learner to evaluate his or her own leadership style and will learn how that style is best utilized in personal, school, or community situations. The learner will develop organizational strategies and project management skills for completing successful self and group and projects within a goal-focused structure. The learner will understand the skills necessary for conflict resolution and consensus building. The learner will identify career-focused practices and habits necessary for effective communication both internally (within our school) and external (within our community).

## PRINCIPLES OF TEACHING

Principles of Teaching PRIN TEACH 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. • Required Prerequisites: None • Recommended Prerequisites: None • 2 semester course, 2 semesters required, 1 credit per semester, 2 credits maximum • Counts as a directed elective or elective for all diplomas

## JOBS FOR AMERICA'S GRADUATES (JAG)

0522/0509

10-12

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. • Required Prerequisites: none • Recommended Prerequisites: none • Credits: 2 semester course, 1 credits per semester, 4 credits maximum

## SCIENCE

### BIOLOGY I

3024

9-12

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

### INTEGRATED CHEMISTRY-PHYSICS

3108

9-12

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

### CHEMISTRY I

3064

10-12

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

### PHYSICS I

3084

10-12

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

theory and by evaluating and communicating the results of those investigations according to accepted procedures. **This course qualifies as a quantitative reasoning course.**

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

3060

*Dual Credit & Weighted Course*

11-12

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

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

3020

*Dual Credit & Weighted Course*

11-12

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

### ANATOMY AND PHYSIOLOGY

5276

11-12

*Anatomy and Physiology* is a course in which students investigate concepts related to Health Science with emphasis on the interdependence of systems and the contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, the skeleton, and muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with human anatomy and physiology. Students will understand the structure, organization, and function of the various components of the healthy body in order to apply this knowledge in all health-related fields.

### EARTH AND SPACE SCIENCE

3044

9-12

*Earth and Space Science I* is a course focused on the following core topics: universe; solar system; Earth cycles and systems; atmosphere and hydrosphere; solid Earth; Earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation of natural phenomena and experimentation, by designing and conducting investigations guided by theory, and by evaluating and communicating the results of those investigations according to accepted procedures.

## CAREER CLUSTER: HEALTH SCIENCES

### ANATOMY AND PHYSIOLOGY

5276

11-12

*Anatomy and Physiology* is a course in which students investigate concepts related to Health Science with emphasis on the interdependence of systems and the contributions of each system to the maintenance of a healthy body. It introduces students to the cell, which is the basic structural and functional unit of all organisms, and covers tissues, integument, the skeleton, and muscular and nervous systems as an integrated unit. Through instruction, including laboratory activities, students apply concepts associated with human anatomy and physiology. Students will understand the structure, organization, and function of the various components of the healthy body in order to apply this knowledge in all health-related fields.

### PLTW PRINCIPLES OF THE BIOMEDICAL SCIENCES

*NDHS Scheduling Guide 45*

5218

Year 1

9-12

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

### PLTW HUMAN BODY SYSTEMS

5216

Year 2

10-12

*PLTW Human Body Systems* is a course designed to engage students in the study of basic human physiology and the care and maintenance required to support the complex systems. Using a focus on human health, students will employ a variety of monitors to examine body systems (respiratory, circulatory, and nervous) at rest and under stress and observe the interactions between the various body systems. Students will use appropriate software to design and build systems to monitor body functions. **This course fulfills a science requirement for all diploma types. This course will be taught at South Decatur.**

### PLTW MEDICAL INTERVENTIONS

5217

Year 3 / Weighted Course

11-

12

*PLTW Medical Interventions* is a course that studies medical practices including interventions to support humans in treating disease and maintaining health. Using a project-based learning approach, students will investigate various medical interventions that extend and improve quality of life including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care. Students will also study the design and development of various interventions including vascular stents, cochlear implants, and prosthetic limbs. Lessons will cover the history of organ transplants and gene therapy with additional readings from current scientific literature addressing cutting edge developments. Using 3-D imaging software, students will design and build a model of a therapeutic protein. **This course fulfills a science requirement for all diploma types and will be taught at South Decatur.**

### PLTW BIOMEDICAL INNOVATIONS

5219

Year 4 / Weighted Course

12

*PLTW Biomedical Innovations* is a capstone course designed to give students the opportunity to design innovative solutions for the health challenges of the 21st century as they work through progressively challenging open-ended problems, addressing topics such as clinical medicine, physiology, biomedical engineering, and public health. They have the opportunity to work on an independent project and may work with a mentor or advisor from a university, hospital, physician’s office, or industry. Throughout the course, students are expected to present their work to an adult audience that may include representatives from the local business and healthcare community. **This course will be taught at South Decatur.**

### PRINCIPLES OF HEALTHCARE: NURSING I

7168

Dual Credit

10-12

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

### HEALTHCARE SPECIALIST: CNA

7166

Dual Credit

11-12

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

## MEDICAL TERMINOLOGY

5274

*Dual Credit*

11-12

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

## SOCIAL STUDIES

### WORLD HISTORY AND CIVILIZATION

1548

9-10

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

### INDIANA STUDIES

1518

9-12

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

### ETHNIC STUDIES

1516

9-12



*Ethnic Studies* provides opportunities to broaden students' perspectives concerning lifestyles and cultural patterns of ethnic groups in the United States. This course will either focus on a particular ethnic group or groups, or use a comparative approach to the study of patterns of cultural development, immigration, and assimilation, as well as the contributions of specific ethnic or cultural groups. The course may also include analysis of the political impact of ethnic diversity in the United States.

## **SOCIOLOGY**

1534

11-12

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

## **PSYCHOLOGY**

1532

11-12

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

## **UNITED STATES HISTORY**

1542

11

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

## **AP UNITED STATES HISTORY**

1562

*Weighted Course*

11

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

**must take the AP Exam in May to use this course to fulfill a requirement of the Academic Honors and Technical Honors Diplomas.**

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

## **ECONOMICS**

1514

12

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

## **AP MACROECONOMICS**

1564

*Weighted Course*

12

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

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

## **UNITED STATES GOVERNMENT**

1540

12

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

# **WORLD LANGUAGES**

## **SPANISH I**

2120

9-12

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

## SPANISH II

2122

9-12

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

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

2124

*Dual Credit Course*

10-12

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

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

2126

*Dual Credit and Weighted Course*

11-12

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

## SPANISH V

2126

12

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

the integration of concepts and skills from other content areas with the target language and cultural understanding, as well as the exploration of community resources intended for native Spanish speakers.

## CAREER CLUSTER: CTE WORK-BASED LEARNING

### WORK-BASED LEARNING

5974

12

Work-based Learning Capstone is a stand-alone course that prepares students for college and career. Work-Based Learning means sustained interactions with industry or community professionals in real workplace settings, to the extent practicable, or simulated environments at an educational institution that foster in-depth, first hand engagement with the tasks required of a given career field, that are aligned to curriculum and instruction. Work-based Learning Capstone experiences occur in workplaces and involve an employer assigning a student meaningful job tasks to develop his or her skills, knowledge, and readiness for work. A clear partnership agreement and training plan is developed by the student, teacher, and workplace mentor/supervisor to guide the student's work-based experiences and assist in evaluating achievement and performance.

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

## C4 COURSES

### GRAPHIC DESIGN & LAYOUT

5550

11-12

*Graphic Design and Layout* includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in various printing processes as well as activities in designing product packaging and commercial displays or exhibits. **IVY TECH / VISC 102 & VISC 115 dual credit available in this program.**

### GRAPHIC IMAGING TECHNOLOGY

5572

11-12

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

### 3-D COMPUTER ANIMATION & VISUALIZATION

5530

11-12

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

## INTERACTIVE MEDIA

5232

11-12

*Interactive Media* prepares students for careers in business and industry working with interactive media products and services which includes the entertainment industries. This course emphasizes the development of digitally-generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the "virtual workplace." **IVY TECH / VISC 105 & 115 dual credit available in this program.**

## RADIO & TELEVISION I

5986

11-12

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

## RADIO & TELEVISION II

5992

11-12

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

## NETWORKING I

5234

11-12

*Networking I* introduces students to local and wide area networks, home networking, networking standards using the IEEE/OSI Model, network protocols, transmission media and network architecture/ topologies. Security and data integrity are introduced and emphasized throughout this course, which offers students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs, as well as creating a wireless LAN.

## NETWORKING II: INFRASTRUCTURE

4588

11-12

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

## NETWORKING II: SERVERS

5257

11-12

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

## ARCHITECTURAL DRAFTING & DESIGN I

5640

11-12

*Architectural Drafting and Design I* gives students a basic understanding of the detailing skills commonly used by drafting technicians. Areas of study include: lettering, sketching, and the proper use of equipment. This course includes the creation and interpretation of commonly used construction documents. Methods of geometric construction, three-dimensional drawing techniques, and sketching will be taught as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing. This course also

provides students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands-on experience with AutoCAD. They will be expected to complete several projects relating to command topics. **IVY TECH / DESN 101 & 113 dual credit available through this program.**

## **ARCHITECTURAL DRAFTING & DESIGN II**

5652

11-12

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

## **CONSTRUCTION TRADES I**

5580

11-12

*Construction Trades I* classroom and laboratory experiences involve the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of construction, future trends and career options, reading technical drawings and transforming those drawings into physical structures are covered. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching will be presented as well as elementary aspects of residential design and site work. Areas of emphasis will include print reading and drawing, room schedules and plot plans. Students will examine the design and construction of floor and wall systems and develop layout and floor construction skills. Blueprints and other professional planning documents will also be covered. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two- family dwellings and safety practices including Occupational Safety and Health Administration Safety and Health Standards for the construction industry. **IVY TECH / BCTI 100 & 101 dual credit available through this program. NCCER Certification available in this program.**

## **CONSTRUCTION TRADES II**

5578

11-12

*Construction Trades II* builds on the formation, installation, maintenance, and repair skills learned in Construction Trades I. Information on materials, occupations, and professional organizations within the industry will be covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, kitchen cabinets, and baseboard moldings. Students will also develop exterior finishing competencies. The course includes instruction on the installation of cornices, windows, doors and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing. **IVY TECH / BCTI 102 & 103 dual credit available through this program. NCCER Carpentry I Certification available in this program.**

## **CONSTRUCTION TRADES: ELECTRICAL I**

4830

11-12

*Construction Trades: Electrical I* includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This course includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules and plot plans. This course covers both AC and DC circuits. Studies include electron theory, Ohm's Law, Watt's Law, Kirchhoff's Law, series circuits, series-parallel circuits, and other electrical concepts. Students will use the underlying scientific principles related to electricity, to complete construction projects. Mathematical principles will be used to solve electrical problems. Students will also interpret health, safety, and welfare standards and codes as dictated by local, state or federal agencies. **IVY TECH / BCTI 130 dual credit available through this program.**

## CONSTRUCTION TRADES: ELECTRICAL II

4832

11-12

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

## INDUSTRIAL AUTOMATION & ROBOTICS

5610

11-12

*Industrial Automation and Robotics I*, will introduce students to design and programming concepts in basic robots that use sensors and actuators to solve specific problems and complete specific tasks. This will include introductory programming autonomous mode. Students will also learn to program a humanoid robot, tethered and in autonomous mode, able to react to specific circumstances and perform human-like tasks when programming is complete. This course will provide fundamentals in industrial robotics basic programming and operations. Students will program an industrial robot through explanation of a teach pendant and use proper programming commands with hands-on utilization of an industrial robot. This course will provide fundamental knowledge and skills in basic lasers, pneumatics, hydraulics, mechanics, basic electronics, and programmable logic controllers along with an understanding of career pathways in this sector. **IVY TECH / ADMF 112 Automation Mechatronics Mechanical Systems, INDT 113 Basic Electricity & INDT 104 Fluid Power Basics dual credit available in this program.**

## INDUSTRIAL AUTOMATION & ROBOTICS II

5612

11-12

*Industrial Automation and Robotics II*, focuses on industrial robots, programming PLC's, automating cells, advanced programming, and designing/building task oriented robots. Students will engage in active learning, critical thinking, and problem solving through advanced robotic procedures and processes. Students will learn industrial robotic programming languages, as well as strategies for improving efficiency through automation. Students will study basic computer numerical controlled (CNC) machining and will combine automation and CNC machining to perform common industrial tasks. They will also apply knowledge to real world situations to create working solutions. **IVY TECH / ADMF 122 Automation Mechatronics Electrical & Robot Systems dual credit available in this program.**

## ELECTRONICS & COMPUTER TECHNOLOGY I

5684

11-12

*Electronics and Computer Technology I* introduces students to the fundamental electronic concepts necessary for entry into an electronic and computer systems career. Classroom and laboratory experiences will allow students to begin their career preparation in the fundamental electronics concepts of Jobsite Skills, DC Basics, AC Basics, and Personal Computer Design, and will incorporate safety, technical writing, mathematical concepts, and customer service. **IVY TECH / EECT 101 Introduction to Electronics & INDT 113 Basic Electricity dual credit available in this program.**

## ELECTRONICS & COMPUTER TECHNOLOGY II

5694

11-12

*Electronics and Computer Technology II* provides the opportunity for students to continue with foundational electronic concepts including circuit analysis and digital electronics modules. This course focuses on applying electronic concepts to real-world solutions in the fields of: industrial technology, emerging electronic technologies, residential and commercial electronic communication, and automation. Industry certifications and additional post-

secondary education are critical components of this pathway. Classroom, laboratory, and Work-based experiences in the fundamental electronics concepts of circuit analysis and digital electronics as well as one of the optional modules will incorporate safety, technical writing, mathematics, and customer service. **IVY TECH / EECT 112 Digital Fundamentals dual credit available in this program.**

### **MECHANICAL DRAFTING & DESIGN I**

4836

11-12

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

### **MECHANICAL DRAFTING & DESIGN II**

4838

11-12

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

### **PRECISION MACHINING I**

5782

11-12

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

### **PRECISION MACHINING II**

5784

11-12

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

### **WELDING TECHNOLOGY I**

5776

11-12

*Welding Technology I* includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and Shielded Metal Arc welding. This course is designed for individuals who intend to make a career as a Welder, Technician, Sales, Designer, Researcher or Engineer. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. **IVY TECH / WELD 100 Welding Process & WELD 108 Shielded Metal Arc Welding dual credit available in this course. AWS Sense Certificate available in this program.**

### **WELDING TECHNOLOGY II**

5778

11-12

*Welding Technology II* builds on the skills covered in Welding Technology I. Emphasis is placed on safety at all times. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols,



and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. **IVY TECH / WELD 109 Oxy-Fuel Gas Welding & Cutting, WELD 207 Gas Metal Arc MIG Welding, and WELD 208 Gas Tungsten Arc TIG dual credit available in this course. AWS Sense Certificate available in this program.**

## DENTAL CAREERS I

5203

11-12

*Dental Careers I* prepares the student for an entry-level dental assisting position. Emphasis is placed on the clinical environment, chair-side assisting, equipment/instrument identification, tray set-ups, sterilization, and characteristics of microorganisms and disease control. In addition, oral, head and neck anatomy, basic embryology, histology, tooth morphology, charting dental surfaces, and illness are all introduced. Simulated in-school laboratories and/or extended laboratory experiences are also included to provide opportunities for students to further develop clinical skills and the appropriate ethical behavior. Leadership skills are developed and community service opportunities are provided through participation in HOSA. Students have the opportunity to compete in a number of competitive events at both the state and national level. **IVY TECH / DENT 115 Preclinical Practice I dual credit available in this course.**

## DENTAL CAREERS II

5204

11-12

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

## VETERINARY CAREERS I

5211

11-12

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

## VETERINARY CAREERS II

5212

11-12

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

## EARLY CHILDHOOD EDUCATION I

5412

11-12

*Early Childhood Education* prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate the study of suggested topics. Major course topics include: career paths in early childhood education; promoting child development and learning; building family and community relationships; observing, documenting, and assessing to support young children and families; using developmentally effective approaches; using content knowledge to build meaningful curriculum, and becoming an early childhood education professional. The course provides an overview of the history, theory, and foundations of early childhood education as well as exposure to types of programs, curricula, and services available to young children. Students examine basic principles of child development, importance of family, licensing, and elements of quality care of young children. The course addresses planning and guiding developmentally appropriate activities for young children in various childcare settings; developmentally appropriate practices of guidance and discipline; application of basic health, safety, and nutrition principles when working with children; overview of management and operation of licensed child care facilities or educational settings; child care regulations and licensing requirements; and employability skills. Intensive experiences in one or more early childhood settings, resumes, and career portfolios are required components. A standards-based plan for each student guides the laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Early Childhood Education teacher. Student laboratory/field experiences may be either school-based or "on-the-job" in community-based early childhood education centers or in a combination of the two. Dual credit agreements with post-secondary programs are encouraged. **IVY TECH / ECED 100 Intro to Early Childhood Ed & ECED 101 Health, Safety & Nutrition dual credit available in this program. Child Development Associate Certificate available in this program.**

## EARLY CHILDHOOD EDUCATION II

5406

11-12

*Early Childhood Education II* prepares students for employment in early childhood education and related careers that involve working with children from birth to 8 years (3rd grade) and provides the foundations for study in higher education that leads to early childhood education and other child-related careers. ECE II is a sequential course that builds on the foundational knowledge and skills of Early Childhood Education I, which is a required prerequisite. In ECE II students further refine, develop, and document the knowledge, skills, attitudes, and behaviors gained in the foundational course. Major topics of ECE II include: overview of the Child Development Associate (CDA) credential, safe and healthy learning environment, physical and intellectual competence, social and emotional development, relationships with families, program management, and professionalism. The course standards parallel the expectations and documentation required for Child Development Associate (CDA) credentialing. These include rigorous levels of self-critique and reflection; performance assessments by instructors, parents, and other professionals; comprehensive assessment of knowledge through a standardized exam; and other professional documentation. 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. **IVY TECH / ECED 105 CDA Process dual credit available in this program. Child Development Associate Certificate available in this program.**

## EDUCATION PROFESSIONS I

5408

11-12

*Education Professions I* provides the foundation for employment in education and related careers and prepares students for study in higher education. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Exploratory field experiences in classroom settings and career portfolios are required components. A standards-based plan guides the students' field experiences. **IVY TECH / EDUC 101 Intro to Teaching dual credit available in this program.**

## EDUCATION PROFESSIONS II

5404

11-12

*Education Professions II* prepares students for employment in education and related careers and provides the foundation for study in higher education in these career areas. An active learning approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of education and related careers. The course of study includes, but is not limited to: the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. Extensive field experiences in one or more classroom settings, resumes, and career portfolios are required components. A standards-based plan guides the students' field experiences. Students are monitored in their field experiences by the Education Professions II teacher. Articulation with post-secondary programs is encouraged. **IVY TECH / EDUC 230 The Exceptional Child & EDUC 233 Literacy Development Through Children's Literature dual credit available in this program.**

## COSMETOLOGY I

5802

11-12

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

## COSMETOLOGY II

5806

11-12

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

## CULINARY ARTS & HOSPITALITY I

5440

11-12

*Culinary Arts and Hospitality I* prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the hospitality industry. This course builds a foundation that prepares students to enter the Advanced Culinary Arts or Advanced Hospitality courses. Major topics include: introduction to the hospitality industry; food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; basic culinary skills; culinary math; and food preparation techniques and applications; principles of purchasing, storage, preparation, and service of food and food products; ; apply basic principles of sanitation and safety in order to maintain safe and healthy food service and hospitality environments; use and maintain related tools and equipment; and apply management principles in food service or hospitality operations. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory experiences. Students are monitored in their laboratory experiences by the Culinary Arts and Hospitality teacher. Articulation with post-secondary programs is encouraged. **ProStart National Certificate of Achievement available through this program.**

## CULINARY ARTS & HOSPITALITY II: CA

5346

11-12

*Culinary Arts and Hospitality II: Culinary Arts* prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. Advanced Culinary Arts builds upon skills and techniques learned in Culinary Arts and Hospitality Management, which must be successfully completed before enrolling in this advanced course. Work-

based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory and Work-based experiences. Students are monitored in these experiences by the Advanced Culinary Arts teacher. Articulation with post-secondary programs is encouraged. **IVY TECH / HOSP 101 Sanitation & First Aid, HOSP 102 Basic Food Theory & Skills, and HOSP 105 Introduction to Baking dual credit available in this program. ProStart National Certificate of Achievement and ServSafe Food Manager Certificate available in this program.**

## **CULINARY ARTS & HOSPITALITY II: HOSPITALITY MANAGEMENT**

5458

11-12

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

## **CRIMINAL JUSTICE I**

5822

11-12

*Criminal Justice I* Introduces specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss prevention services, and homeland security. This course provides an introduction to the purposes, functions, and history of the three primary parts of the criminal justice system as well as an introduction to the investigative process. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports. This course provides the opportunity for dual credit for students who meet post-secondary requirements for earning dual credit and successfully complete the dual credit requirements of this course. **VU / LAWE 100 Survey of Criminal Justice & LAWE 150 Criminal Minds & Deviant Behavior dual credit available in this program.**

## **CRIMINAL JUSTICE II**

5824

11-12

*Criminal Justice II* introduces students to concepts and practices in traffic control as well as forensic investigation at crime scenes. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry as well as collection of evidence, developing and questioning suspects, and protecting the integrity of physical evidence found at the scene and while in transit to a forensic science laboratory. Procedures for the use and control of informants, inquiries keyed to basic leads, and other information-gathering activities and chain of custody procedures will also be reviewed. Current trends in criminal justice and law enforcement will also be covered. **VU / LAWE 101 Basic Police Operations & LAWE 145 Ethics & Professionalism in CJ dual credit available in this program.**

## **AUTO SERVICES TECHNOLOGY I**

5510

11-12

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

**Repair, and AUTI 145 Driveline Services dual credit available in this program. ASE Engine Repair Certification and ASE Steering & Suspension Certification available in this program.**

## **AUTO SERVICES TECHNOLOGY II**

5546

11-12

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