

LAKE CENTRAL HIGH SCHOOL  
COURSE SELECTION GUIDE



2021-2022

# LAKE CENTRAL HIGH SCHOOL

Office Hours: 6:50 a.m. – 2:50 p.m.

Phone: 219-365-8551

Lake Central High School (LCHS) is located in St. John, Indiana and serves the “Tri-town Area” which includes the communities of Dyer, Schererville, and St. John, Indiana. The Tri-town covers an area of 32 square miles and has over 60,000 diverse residents. It is situated in the northwest corner of Indiana only 35 short miles southeast of Chicago, IL and 158 miles northwest of Indianapolis, IN. The district’s proximity to large metropolitan areas, along with settings ranging from suburban to rural, has caused continued growth and desirability in the community.

The Lake Central Community School district is made up of six elementary schools (K-4), three middle schools (5-8), and one high school (9-12). Approximately 10,000 culturally, academically, and economically diverse students are served in an educationally rigorous and challenging atmosphere

As a result of rapid community growth and advances in educational technology, LCHS completed a significant renovation in 2015 on the current school campus.

Renovations include:

- 880,000 square feet of student-centered space
- Three story Academic Wing
- Olympic size competition pool
- 1,100 seat Theatre
- Outdoor Athletic Complex with turf baseball, softball and football fields
- 3,800 seat gym

Lake Central High School is fully accredited by the State of Indiana. The course offerings available to LCHS students are among the most abundant and rigorous in the state.

- 206 Course Options
- 23 Advanced Placement (AP) Courses
- 30 Dual Credit Courses, with more available through the Area Career Center
- 23 Career Technology Courses and Certifications
- 18 Honors/Advanced Courses
- 7 Project Lead The Way (PLTW) Courses

Lake Central High School enrolls approximately 3,200 students in grades 9-12. This places LCHS as one of the top 6 largest public high schools in the State of Indiana.

## Graduates

- 94% Graduation Rate
- 90% Core 40 Diploma or higher
- 41% Core 40 with Academic Honors
- 82% of Graduates pursued a college education

## State of Indiana

### End of Course Assessments

**97% of LCHS Graduates were proficient in both English and Math ECA Standards**

## Advanced Placement

- 1,356 AP Tests taken in 2020
- 62% Earned a 3 or higher
- 63% of 2020 grads earned a 3 or higher

## Dual Credit

- 40,000+ Dual Credits earned since 2011
- Dual Credit partnerships with FOUR Indiana universities/colleges!

**LCHS CLASS OF 2019 earned more than \$20.5 MILLION in SCHOLARSHIPS!!**



## GRADUATION REQUIREMENTS

*Every student must have at least 46 credits in order to receive a diploma from Lake Central High School. One credit for each course passed each semester.*



<b>CORE40</b> (minimum 46 credits)	
<b>Course and Credit Requirements</b>	
<b>English/ Language Arts</b>	8 credits Including a balance of literature, composition and speech.
<b>Mathematics</b>	6 credits 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>
<b>Science</b>	6 credits 2 credits: Biology I 2 credits: Chemistry I or Physics I or Integrated Chemistry-Physics 2 credits: any Core 40 science course
<b>Social Studies</b>	6 credits 2 credits: U.S. History 1 credit: U.S. Government 1 credit: Economics 2 credits: World History/Civilization or AP Human Geography/Geography/History of the World
<b>Directed Electives</b>	5 credits World Languages Fine Arts Career-Technical
<b>Physical Education</b>	2 credits (1 Gym, 1 Pool)
<b>Health and Wellness</b>	1 credit
<b>Personal Financial Responsibility</b>	1 credit
<b>Electives*</b>	6 credits *At least 6 credits should come from a College and Career Pathway.
<b>Lake Central High School - 46 Total Credits Required</b>	

<b>CORE40 with Academic Honors</b> (minimum 47 credits)
For the <b>Core 40 with Academic Honors</b> diploma, students must: <ul style="list-style-type: none"> <li>• Complete all requirements for Core 40.</li> <li>• Earn 2 additional Core 40 math credits.</li> <li>• Earn 6-8 Core 40 world language credits (6 credits in one language or 4 credits each in two languages).</li> <li>• Earn 2 Core 40 fine arts credits.</li> <li>• Earn a grade of a "C" or better in courses that will count toward the diploma.</li> <li>• Have a grade point average of a "B" or better.</li> <li>• Complete <u>one</u> of the following:               <ol style="list-style-type: none"> <li>A. Earn 4 credits in 2 or more AP courses and take corresponding AP exams</li> <li>B. Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list.</li> <li>C. Earn two of the following:                   <ol style="list-style-type: none"> <li>1. A minimum of 3 verifiable transcribed college credits from the approved dual credit list,</li> <li>2. 2 credits in AP courses and corresponding AP exams,</li> </ol> </li> <li>D. Earn a combined score of 1750 or higher on the SAT critical reading, mathematics and writing sections and a minimum score of 530 on each</li> <li>E. Earn an ACT composite score of 26 or higher and complete written section</li> </ol> </li> </ul>

<b>CORE40 with Technical Honors</b> (minimum 47 credits)
<ul style="list-style-type: none"> <li>• Complete all requirements for Core 40.</li> <li>• Earn 6 credits in the college and career preparation courses in a state-approved College &amp; Career Pathway and one of the following:               <ol style="list-style-type: none"> <li>1. State approved, industry recognized certification or credential, or</li> <li>2. Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits</li> </ol> </li> <li>• Earn a grade of "C" or better in courses that will count toward the diploma.</li> <li>• Have a grade point average of a "B" or better.</li> <li>• Complete <u>one</u> of the following,               <ol style="list-style-type: none"> <li>A. Any one of the options (A - F) of the Core 40 with Academic Honors</li> <li>B. Earn the following scores or higher on WorkKeys; Reading for Information – Level 6, Applied Mathematics – Level 6, and Locating Information-Level 5.</li> <li>C. Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75.</li> <li>D. Earn the following minimum score(s) on Compass; Algebra 66, Writing 70, Reading 80</li> </ol> </li> </ul>

**Succeeding with the Indiana Core 40**  
**(Lake Central students must earn 46 credits)**

**STUDENTS:**

- **Must meet the Core 40 standard to be considered for admission to an Indiana four-year college or university.**
- **Should meet the Core 40 standard to ensure success in one-year and two-year college and technical training programs.**
- **Should meet the Core 40 standard to ensure success in the workforce.**

The Core 40 diploma became Indiana's required high school curriculum with the class of 2010. Students entering high school after 2010 are expected to complete the requirements for a Core 40 diploma.

By providing all Indiana students a balanced sequence of academically rigorous high school courses in the core subjects of English/language arts, mathematics, science, and social studies; physical education/health and wellness; and electives including world languages, career/technical, and fine arts, the Core 40 requirement gives all our students the opportunity to compete with the best. For more information about Core 40 and your career and course plan, see your counselor and/ or visit Learn More Resource Center at [www.learnmoreindiana.org](http://www.learnmoreindiana.org).

To graduate with less than Core 40, a student must complete a formal opt-out process involving parental consent. See your school counselor for further details.

This Graduation Pathway Checklist is for the Class of 2023 and beyond.

# Lake Central High School

## Graduation Pathway Checklist



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

*Students must complete all three Graduation Pathway Requirements*

### 1. Indiana High School Diploma

General       Core 40       Academic Honors       Technical Honors

### 2. Learn and Demonstrate Employability Skills

**Students must complete at least one of the following:**

<input type="checkbox"/>	<p><b>Project-Based Learning:</b> Working for an extended period of time to investigate and respond to an authentic, Learn and Demonstrate engaging, and complex question, problem, or challenge. Students engage in a rigorous, extended process of asking questions, Employability Skills 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. <b>Courses that meet Project-Based Learning guidelines are noted in the Course Selection Guide.</b></p> <p>Description: _____</p> <p>Verification Product: _____</p>
<input type="checkbox"/>	<p><b>Service-Based Learning:</b> 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 another experience as approved by the State Board of Education.</p> <p>Description: _____</p> <p>Verification Product: _____</p>
<input type="checkbox"/>	<p><b>Work-Based Learning:</b> 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 or Local Work Ethic Certificate, employment outside of the school day, or another experience as approved by the State Board of Education.</p> <p>Description: _____</p> <p>Verification Product: _____</p>

### 3. Postsecondary –Ready

**Students must complete at least one of the following:**

<input type="checkbox"/>	<p><b>Honors Diploma</b>    <input type="checkbox"/> AHD    <input type="checkbox"/> THD</p>
<input type="checkbox"/>	<p><b>ACT College Ready Benchmarks</b> (18 in English or 22 in Reading and 22 in Math or 23 in Science)</p> <p>English _____ or Reading _____ and Math _____ or Science _____ Competencies</p>
<input type="checkbox"/>	<p><b>SAT College Ready Benchmarks</b> (480 in EBRW, 530 in Math) EBRW _____ Math _____</p>
<input type="checkbox"/>	<p><b>ASVAB</b> (minimum score of 31) AFQT score _____</p>
<input type="checkbox"/>	<p><b>State and Industry Recognized Credential or Certification</b> _____</p>
<input type="checkbox"/>	<p><b>CTE Concentrator</b> (Earn a "C" average in 2 courses within a CTE Pathway for Class of 2023 and beyond.)</p> <p>_____ (Pathway)</p> <p>CTE1 Grade _____ CTE2 Grade _____ Average CTE Course GPA _____</p>
<input type="checkbox"/>	<p><b>AP/Dual Credit</b> (Earn "C" average in at least three courses - at least one in core)</p> <p>AP/DC1 _____ AP/DC2 _____ AP/DC3 _____ AP/DC GPA _____ Core AP Course _____</p>

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

Administrator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **CLASS OF 2023 AND BEYOND**

Students in the Class of 2023 and beyond are required to complete the State of Indiana diploma requirements on page 3 AND the Graduation Pathway requirements on page 4. These Graduation Pathways replace the ISTEP 10+ assessment.

### **CLASS OF 2022**

Students in the Class of 2022 must complete the State of Indiana diploma requirements on page 3 AND pass the ISTEP 10+ assessment. All students must attempt the ISTEP but those that do not pass one or both parts (Math and ELA) may utilize the Graduation Pathways on page 4 as a replacement for the assessment. Parents must opt their student out of further ISTEP testing through Skyward. The ISTEPs and Graduation Pathways are parallel approaches to earn a diploma and do not affect the diploma type earned.

### **QUANTITATIVE REASONING COURSES**

In November 2011, the State Board of Education passed graduation requirements that affect incoming freshman beginning in 2012-2013, including requirements for quantitative reasoning (applied mathematics) courses.

- For the Core 40, Academic Honors (AHD), and Technical Honors (THD) diplomas, students must take a mathematics course or a quantitative reasoning (applied mathematics) course each year they are enrolled in high school. 511 IAC 6-7.1-6 (a) (4)
- For the General Diploma, students must earn two credits in a mathematics course or a quantitative reasoning (applied mathematics) course during their junior or senior year. 511 IAC 6-7.1-4 (c) (4)
- A quantitative reasoning (applied mathematics) 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."
- The Indiana Department of Education will provide an annual review to determine the high school courses that meet these criteria.

#### **Business, Marketing, and Information Technology**

Advanced Accounting  
Computer Science I  
Computer Science II:  
Personal Financial Responsibility  
AP Computer Science A

#### **Engineering and Technology**

Civil Engineering and Architecture  
Engineering Design and Development  
Principles of Engineering

#### **Social Studies**

Economics  
AP Macroeconomics  
AP Microeconomics

#### **Science**

Chemistry I  
H Chemistry II  
Chemistry ACP  
Integrated Chemistry-Physics  
AP Physics 1: Algebra-Based  
AP Physics B  
AP Physics C Physics I  
AP Biology  
AP Chemistry  
AP Environmental Science

#### **Trade and Industrial**

Advanced Manufacturing II  
Architectural Drafting and Design II  
Construction Trades II  
Precision Machining I  
Precision Machining II

**CLASS RANK AND GRADUATION HONORS**

On August 17, 2009, the Lake Central School Board adopted a policy to eliminate class rank from the high school transcript. Board Policy 007.22 took effect with the graduating class of 2012. There will no longer be a class valedictorian and salutatorian.

**DISTINGUISHED HONORS AT GRADUATION**

Grade point average is based on a 4.0 scale. A weighted factor is used for Honors and Advanced Placement classes resulting in an individual's GPA exceeding a 4.0. Three distinct classifications will be recognized at graduation:

<b>Distinction</b>	<b>Translation</b>	<b>Accoutrements for Ceremony</b>	<b>Required GPA</b>
SUMMA CUM LAUDE	"With highest honor"	Hood	4.5 or higher
MAGNA CUM LAUDE	"With great honor"	Stole	4.2500-4.4999
CUM LAUDE	"With honor"	Cords	4.000-4.2499

To qualify for any of these distinctions, individuals will need a **minimum of 47 credits** at the end of the 8<sup>th</sup> semester. (Note: Senior Honors Night takes place prior to the completion of the 8<sup>th</sup> semester. As a result, students that have qualified for one of the distinctions by the end of the 7<sup>th</sup> semester are recognized at this event. **Every effort** will be made to recognize students that reach one of the distinctions at the end of the 8<sup>th</sup> semester – graduation program, commencement seating, etc., but due to time restraints, this cannot be guaranteed.)

**EARLY GRADUATION**

Students who have completed all graduation requirements may graduate early. Students need to plan ahead carefully when considering this option. This decision should include a detailed plan of completing all required courses (may include summer courses) and students should work closely with their Lake Central School Counselor as well as their prospective college admissions offices. In order to ensure all graduation requirements are met and afford the appropriate planning time, students should contact their assigned counselor a minimum of one year in advance. Those electing to graduate in January of their senior year should speak to their counselor no later than the end of first semester – junior year. **Students electing to graduate in three years should speak to their counselors no later than the end of second semester – sophomore year and complete the required 3 Year Graduation form.**

# BELL SCHEDULE

Every class meets three days a week. Monday and Thursday are Blue Days. Tuesday and Friday are White Days. Blue and White days consist of four 90 minute blocks. All classes meet on Wednesday for approximately 50 minutes. Students are able to take 7 courses in a semester plus an extra 90 minute period that meets twice weekly on White Days called Pathways to Excellence (PtE). During the first 30 minutes of PtE, students in 9<sup>th</sup> grade will earn credit for Preparing for College and Careers. 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students will have grade level specific seminars. The remaining 60 minutes is available for students to receive Academic Assistance.

## DAILY BELL SCHEDULE

Monday (Blue Day)	Tuesday (White Day)	Wednesday (Traditional Day)	Thursday (Blue Day)	Friday (White Day)
<b>1st Period</b> 7:15 - 8:47 (92)	<b>5th Period</b> 7:15 - 8:47 (92)	<b>1st Period</b> 7:15 - 8:03 (48)	<b>1st Period</b> 7:15 - 8:47 (92)	<b>5th Period</b> 7:15 - 8:47 (92)
		<b>2nd Period</b> 8:09 - 8:57 (48)		
<b>2nd Period</b> 8:53 - 10:25 (92)	<b>Pathways to Excellence</b> 8:53 - 10:25 (92) 8:53 - 9:25 CTE 9:25 - 10:25 Academic Assistance	<b>5th Period</b> 9:03 - 9:51 (48)	<b>2nd Period</b> 8:53 - 10:25 (92)	<b>Pathways to Excellence</b> 8:53 - 10:25 (92) 8:53 - 9:25 CTE 9:25 - 10:25 Academic Assistance
<b>3rd Period</b> 10:31 - 12:31 (120) A Lunch = 10:25 - 10:55 B Lunch = 10:57 - 11:27 C Lunch = 11:29 - 11:59 D Lunch = 12:01 - 12:31	<b>6th Period</b> 10:31 - 12:31 (120) A Lunch = 10:25 - 10:55 B Lunch = 10:57 - 11:27 C Lunch = 11:29 - 11:59 D Lunch = 12:01 - 12:31	<b>6th Period</b> 9:57 - 10:45 (48)	<b>3rd Period</b> 10:31 - 12:31 (120) A Lunch = 10:25 - 10:55 B Lunch = 10:57 - 11:27 C Lunch = 11:29 - 11:59 D Lunch = 12:01 - 12:31	<b>6th Period</b> 10:31 - 12:31 (120) A Lunch = 10:25 - 10:55 B Lunch = 10:57 - 11:27 C Lunch = 11:29 - 11:59 D Lunch = 12:01 - 12:31
		<b>3rd Period</b> 10:51 - 12:21 (90) A Lunch = 10:45 - 11:15 B Lunch = 11:18 - 11:48 C Lunch = 11:51 - 12:21		
<b>4th Period</b> 12:37 - 2:09 (92)	<b>7th Period</b> 12:37 - 2:09 (92)	<b>4th Period</b> 12:27 - 1:15 (48)	<b>4th Period</b> 12:37 - 2:09 (92)	<b>7th Period</b> 12:37 - 2:09 (92)
		<b>7th Period</b> 1:21 - 2:09 (48)		

### Pathways to Excellence (PtE) 8:53-10:25

Grade	Course	Credits	Description
9	<b>Preparing for College and Careers</b>	1/year	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.
10	<b>Sophomore Seminar</b>	0	Grade level specific activities; revisit 4 Year Plan, English and Math ISTEP preparation, testing strategies, targeted instruction for improvement, continued development of career plans and pathways, interest inventories.
11	<b>Junior Seminar</b>	0	Grade level specific activities; revisit 4 Year Plan, ACT/SAT preparation, testing strategies, targeted instruction for improvement, continued development of career plans and pathways, interest inventories, leadership opportunities, college application process.
12	<b>Senior Seminar</b>	0	The focus of this course is to prepare students for the transition from high school to post-secondary plans. Examples of the work that can be done in this course includes completing college applications, research trades and apprenticeships, write application essays, receive reminders about deadlines, and receive cap and gown information.

## GENERAL INFORMATION

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All student records and personal information are considered private and confidential. Information will not be released to third parties without written consent of the parent or the student who is of legal age. No third party recipient of records shall release any part without written consent

### REPORT CARDS

Grade reports are finalized every 9-weeks. Students and parents can regularly check grades, receive e-mail alerts, and read class-related information through Skyward.

### GRADING STANDARDS

Percentage	Letter Grade	GPA Index	Weighted GPA Index
100% - 92.5%	A	4.00	5.0
92.49% - 89.5%	A-	3.67	4.67
89.49% - 86.5%	B+	3.33	4.33
86.49% - 82.5%	B	3.00	4.0
82.49% - 79.5%	B-	2.67	3.67
79.49% - 76.5%	C+	2.33	3.33
76.49% - 72.5%	C	2.00	3.0
72.49% - 69.5%	C-	1.67	2.67
69.49% - 66.5%	D+	1.33	1.33
66.49% - 62.5%	D	1.00	1.0
62.29% - 59.5%	D-	0.67	.67
59.49% - 0	F	0	0
Audit (no credit)	W/F, W, N	0	0

All accelerated classes, identified on page 12, reflect an additional 1.0 on the grade index. A grade of "D" in an accelerated class **will not** be awarded the additional 1.0 weighting. Honor roll is based on a 3.0 GPA. The requirement for high honor roll is a 3.67 GPA.

### GRADE REPLACEMENT POLICY

When a student retakes a course, only the higher grade will be calculated in the student's grade point average and the lower grade will be treated as an audit. An audit grade appears on a transcript as an "N". **All courses will remain on the transcript.**

### OUTSIDE CREDIT

Diplomas issued by Lake Central High School will allow up to six (6) credits from outside accredited sources such as Indiana Online Academy or Brigham Young University. Students may take courses through outside accredited institutions any semester after freshman year and must be enrolled in a minimum number of pre-designated credit hours at Lake Central. Documented pre-approval from the LCHS counselor or assistant principal is required and will ensure the course credit will transfer to the Lake Central transcript without issue. Exceptions will be made for students with extenuating circumstances such as serious illness or those who transfer to Lake Central High School.

### **CREDIT RECOVERY**

Lake Central's Credit Recovery Program is meant to allow eligible junior and/or senior students to recover credits in core subjects during the school year and afford them the opportunity to get back on track with their classmates. This program is a privilege that will allow eligible students to complete courses at their own pace and place special emphasis on the necessary areas of remediation. Students will receive a grade no higher than a "C-" upon satisfactory completion of the pretest, learning modules for the unit, posttests and end of semester tests. Only the replacement grade will be calculated in the student's grade point average and the lower grade will be treated as an audit. An audit (no grade) appears on a transcript as an "N". All courses will remain on the transcript. **Credit recovery courses do not meet NCAA standards.**

If a student retakes a course in a regular Lake Central classroom setting or through Indiana Online Academy, there are no restrictions on the grade attainable. The higher grade will be calculated in the student's grade point average and the lower grade will be treated as an audit. An audit (no grade) appears on a transcript as an "N". All courses will remain on the transcript. **It is the responsibility of the student to notify their school counselor upon successful completion of a course.**

### **INDIANA DEPARTMENT OF EDUCATION DUAL CREDIT RULE (off-campus)**

Under certain circumstances, students may be released from their high school schedule to attend college classes and apply the credits earned toward high school graduation. Parents interested in pursuing this option for their child should contact their school counselor for specific information.

### **DUAL CREDIT (on-campus)**

Certain classes at LCHS have been identified as dual credit. Dual credit courses are authorized through an agreement with local colleges or universities. Students must meet all university requirements to be eligible for college credit. In some cases, students will be required to pay a fee to the university to receive the appropriate college credit. For more information, please contact the guidance department or check the LCHS dual credit website. Keep in mind that some courses are designated for dual credit **only** for juniors and seniors. Some colleges require a minimum GPA in order to enroll for dual credit, and some courses may require a placement test to be taken. Please check these requirements before signing up for dual credit. The agreements between Lake Central High School and the colleges, as well as the requirements and fees, are subject to change prior to the start of the courses. Students should be mindful of the college drop dates. A student may drop from dual credit and remain in the course.



## Purdue University Northwest

Approximate Cost \$25/credit hour

High School Course	HS CODE	College Course	No. of College Credit Hours	GPA/Requirements	Core Transfer Library
Composition	E1090D	ENG - 104	3	3.0	Yes
United States History	H1542D	Hist - 152	3	3.0	Yes

## Indiana University Bloomington

Approximate Cost \$25/Credit Hour

High School Course	HS CODE	College Course	No. of College Credit Hours	GPA/Requirements	Core Transfer Library
Chemistry I Honors (ACP- Advanced College Project)	S30901	C-101/C-121	5	2.75	Yes
Anatomy & Physiology Honors (ACP - Advanced College Project)	S5276H	BIO PHSL130/N213	5	2.75	No

## Ivy Tech Community College

Courses at Ivy Tech are Free.

\*Qualifying GPA for Junior/Seniors or Qualifying PSAT/SAT/ACT or Knowledge Assessment Score

High School Course	HS CODE	College Course	No. of College Credit Hours	Requirements or Prerequisite	Core Transfer Library
Administrative and Office Management	B52680	BUSN - 105	3	*	No
Business Law	B45600	BUSN-201	3	*	No
Digital Applications and Responsibility I	B45280	CINS- 101	3	*	No
Intro to Entrepreneurship	B59670	ENTR-101/105	6	*	No
Principles of Business Management	B45620	BUSN-101	3	*	Yes
Marketing Fundamentals	B59140	MKTG-101	3	*	No
Strategic Marketing	B59180	MKTG-230	3	MKTG 101 Marketing Fundamentals	No
Computer Science I	B48010	CINS-137	3	*	No
Computer Science II	B52360	CINS-121	3	PSDEV 120 Computing Logic. COREQUISITES: SDEV 120 Computing Logic.	No

## Ivy Tech Community College

Courses at Ivy Tech are Free.

\*Qualifying GPA for Junior/Seniors or Qualifying PSAT/SAT/ACT or KnowledgeAssessment Score

High School Course	HS CODE	College Course	No. of College Credit Hours	Requirements or Prerequisite	Core Transfer Library
Automotive Technology	V55100	AUTI-100	3	None	No
Automotive Technology	V55100	AUTI-111	3	PREREQUISITE or COREQUISITE: AUTC 100 Introduction to Automotive	No
Automotive Technology	V55100	AUTI-121	3	PREREQUISITE or COREQUISITE: AUTI 111, Electrical Systems I or AUTC 113 Electrical and Electronics I	No
Automotive Technology	V55100	AUTI-122	3	PREREQUISITE or COREQUISITE: AUTI 111, Electrical Systems I or AUTC 113 Electrical and Electronics I	No
Precision Machining I & II	V57820	MTTC-101	3	None	No
Precision Machining I & II	V57820	MTTC-110	3	None	No
Intro To Engineering PLTW	V48120	DESN-101	3	None	No
Principles of Eng. PLTW	V48140	DESN-104	3	PREREQUISITE: DESN 101	No
Civil Engineering Architecture PLTW	V48200	DESN-105	3	PREREQUISITE: DESN 101 & DESN 104	No
Graphic Imaging Tech II	V55720	DESN 120/15)	6	None	No
Trigonometry	2566	MATH 137	3	*	Yes
Pre-calculus	2564	MATH 136	3	*	Yes
Calculus, AB	2527	MATH 211	4	MATH 136 and MATH 137	Yes
Calculus, BC	2527	MATH 211	4	Cohorted Course Sequence	Yes
Calculus, BC	2527	MATH 212	4	Cohorted Course Sequence	Yes
Pre-calculus, Honors	2564	MATH 136	3	*	Yes
Trigonometry, Honors	2566	MATH 137	3	*	Yes

\*Qualifying GPA for Junior/Seniors or Qualifying PSAT/SAT/ACT or KnowledgeAssessment Score

In addition, courses from the Hammond Area Career Center can also earn Dual Credit.

## HONORS AND ADVANCED PLACEMENT COURSES (AP)

In accordance with the purpose and philosophy of Lake Central High School, programs and courses are provided which meet the needs and individual differences of the intrinsically motivated student through honors courses and accelerated programs.

Classroom teachers will recommend students for enrollment in Honors and Advanced Placement classes based upon classroom performance and certain test scores. Several honors and Advanced Placement classes are available to all students who wish to pursue a more rigorous curriculum.

Level changes must be initiated by teachers no later than Tuesday, September 21, 2021 (6 weeks from the start of school). Teachers will track the student's progress and complete a Level Change Form to be reviewed by the student's team. This team includes the assistant principal, dean, school counselor, teacher, department head, and parent. Students dropping a class after the first six weeks will receive a W/F, may only drop to a study hall, and cannot have another study hall already in their schedule. Students performing below a weighted 3.0 for the semester should give serious consideration to transferring to a regular course second semester. Teachers are encouraged to and may recommend a student's transfer from a regular course to an honors course if class performance is exceptional.

Students are eligible to take the AP courses listed for their grade or any course from a previous grade level. Recommended courses, if applicable, should be completed prior to enrolling in an Advanced Placement course. Students may be recommended or advised on specific course placement. These recommendations are made to ensure a student will be challenged yet academically successful. In the event a student/family feels the recommendation is not appropriate, students or parents may submit a Course Recommendation Override form. The student's academic team will meet with the student, parent, counselor, assistant principal, and the department head of the academic course in question to determine final placement. Students who enroll in a course contrary to the final academic team recommendation and chooses to withdraw should be mindful of withdraw deadlines to avoid a W/F on their transcript.

The following accelerated classes are identified with Honors or AP and will reflect an additional 1.0 on the grade index. A grade of "D" in an accelerated class **will not** be awarded the additional 1.0 weighting.

### **Advanced Placement Courses (AP)**

#### **Art and Music**

AP 2-D Art and Design  
AP 3-D Art and Design  
AP Music Theory

#### **Business**

AP Computer Science A  
AP Principles of Computer Science

#### **English**

English 11 AP Language and Composition  
English 12 AP Literature and Composition

#### **Math**

AP Statistics  
AP Calculus AB  
AP Calculus BC

#### **Science**

AP Biology  
AP Chemistry  
AP Environmental Science  
AP Physics 1  
AP Physics C

#### **Social Studies**

AP U.S. Government & Politics  
AP Human Geography  
AP Microeconomics  
AP Macroeconomics  
AP Psychology  
AP US History

### **Honors Courses**

#### **English**

English 9 Honors  
English 10 Honors  
Student Media Honors  
Mass Media Honors

#### **Mathematics**

Algebra II Honors  
Geometry Honors  
Pre-Calculus/Trig Honors

#### **Science**

Anatomy & Physiology Honors (ACP)  
Biology Honors  
Chemistry Honors  
Chemistry Honors I (ACP)  
Chemistry Honors II

#### **World Languages**

French III Honors  
French IV Honors  
German III Honors  
German IV Honors  
Spanish III Honors  
Spanish IV Honors

#### **Interdisciplinary**

AP Seminar  
AP Research

## ADVANCED PLACEMENT (AP) 2021-2022 SCHOOL YEAR

Lake Central High School offers Advanced Placement (AP) classes in the areas of science, math, social studies, English, music and art. The course descriptions are listed in the department sections of this guide. These courses are designed to enable students to pursue college-level studies while in high school. The College Board prescribes the content of AP courses. **At the completion of an AP course, it is strongly recommended that students take the AP exam given nationally in May.** Students desiring to use an AP course to achieve an Honors Diploma must take the AP exam. Universities can award college credit based on the results of these exams. There is a cost associated with the exam. Registration and payment will take place in August-October of 2021 for yearlong and first semester courses, and in February, 2022 for second semester courses. In the 2021 school year, most exams cost \$95/exam with a \$10 Administration Fee. Students **enrolled** in Math, Science, English and Interdisciplinary AP Courses received a waiver from the state for the exam fee. This is an Indiana Department of Education decision and subject to change.

## COURSE REQUESTS AND SCHEDULE CHANGES

**Designing your ideal schedule is an important decision.** The high school master schedule is **created**, the budget is **prepared**, and staff is hired based on student course **requests**. Lake Central High School students are expected to **invest quality time** planning their course requests. This **planning** should consist of **consultation** with parents, teachers, counselors, college advisors, and anyone who could provide **sound advice** while working toward the student's **long-term goals**. **As a result**, students are expected to remain on the schedule that is provided for them at the beginning of the school year and parents must approve all changes.

### Procedures for Schedule Changes:

During the scheduling process for the next year, requests for changes are subject to course availability and should be made with the student's school counselor by **Friday, April 30, 2021**. Any students requesting schedule changes **after April 30, 2021**, will need to complete a **Schedule Change Request** form. This **must be** turned into Guidance no later than **Friday, July 30, 2021 by 3:00pm**. This cannot be emailed or faxed. The **Schedule Change Committee will review requests from Monday, August 2 through Thursday, August 5. Approved requests will be changed. Requests that are denied will be notified via email.**

Any students requesting schedule changes **after 3:00pm on Friday, July 30, 2021**, will need to complete a **Schedule Change Request** form and return it to Guidance **no later than Monday, August 16, 2021 by 2:15pm**. This must be physically dropped off to Guidance and cannot be emailed or faxed. These forms will be reviewed by a **Schedule Change Committee** and approved requests will be completed by **Tuesday, August 19, 2021**. Requests that are denied will be notified via email.

Students **who choose to drop a class after the first six weeks** will receive a **W/F** on their transcript, **may only drop to a study hall**, and **cannot have another study hall already in their schedule**. Students performing below a weighted 3.0 for the semester should give serious consideration to transferring to a regular course second semester. Teachers may also recommend a student's transfer from a regular course to an honors course if class performance is exceptional.

**Level changes** must be **initiated by teachers no later than Tuesday, September 21, 2021**. Teachers will track the student's progress and complete a Level Change Form to be reviewed by the student's academic team. This includes the assistant principal, school counselor, teacher, department head, and parent.

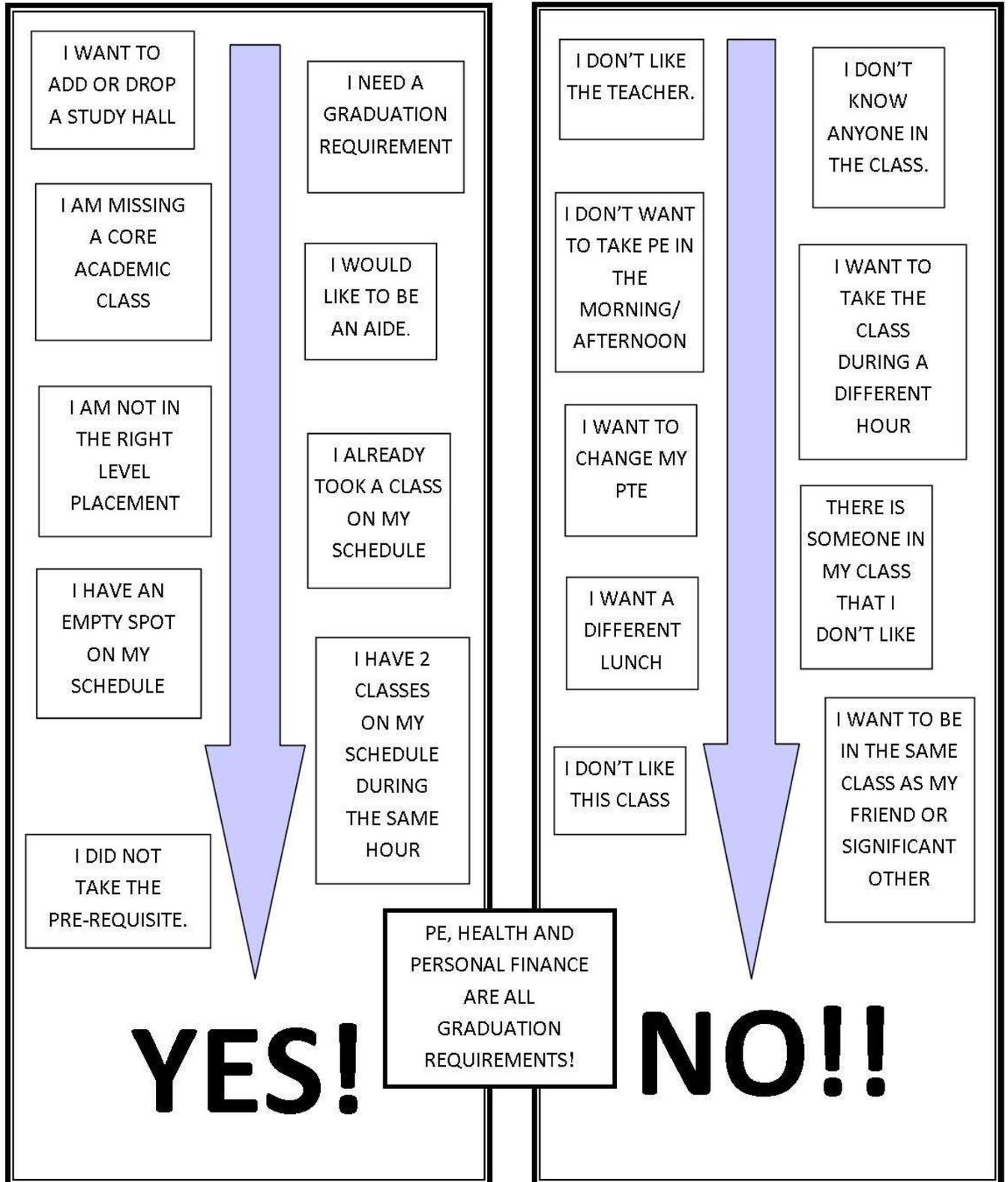
### A student's schedule may also be changed for the following reasons:

- A. Errors made by the school in developing the schedule
- B. The school's need to balance class sizes
- C. Medical reasons with documentation
- D. To correct inappropriate placement - student with a failure and needs to repeat a class or a student placed at an inappropriate level.
- E. To upgrade the content of the schedule - move to an advanced, Honors, or AP course, if available
- F. Scheduling conflicts

**ALL Schedule Change Request forms will be reviewed by the student's academic team to determine if a change is truly needed. ALL changes are contingent on the availability of the course requested. Requests for teacher changes will not be accommodated.** Students are permitted only **one study hall**.

# CAN I CHANGE MY SCHEDULE: 101

## A GUIDE FOR LC STUDENTS



## LAKE CENTRAL HIGH SCHOOL LIBRARY COMMONS

It is the purpose and the mission of the Lake Central Library Commons to empower students to become knowledgeable and critical consumers of information, in all of its varied formats. The Library Commons facility includes two computer labs, two small group project/study rooms, one large group project room and an art gallery showcasing Lake Central student art work. In addition, a student-run technology help desk is also housed on site. The library proper includes 45 student computer workstations and a print collection of over 12,000 volumes. Along with the print collection, numerous subscription databases, eBooks, and digital magazines are also available to students. Digital assets are accessible through the library's website at <http://library.lcsc.us/lake-central-high-school/>.

Students are expected to be courteous and to show respect for their fellow students, the library staff, the library facility and its furnishings, as well as the library materials. Water bottles are permitted in the library; other drinks and snacks are strictly prohibited.

### **Library Hours:** 6:50 AM – 2:50 PM

Students may visit the library before school and after school at their discretion. During the school day, students may visit the library with their classes or with a signed pass from the librarian. Students wishing to visit the library during lunch must obtain a signed pass from the librarian prior to their lunch time. Students are requested to sign in at the circulation desk upon arrival and sign out when leaving the library.

### **PtE:**

Students who wish to visit the library during PtE must request a pass from the librarian at any time before 7:15 AM of the day of the PtE. Only the librarian can issue library PtE passes and last minute requests will not be honored.

### **Study Hall:**

Students who wish to visit the library during study hall must obtain a signed pass from the librarian before 7:15 AM the day of their assigned study hall. There are a limited number of study hall passes available and students should plan ahead if their homework requires them to use the library's collection during their assigned study hall. Last minute pass requests will not be honored, and please understand that the librarian can only issue passes from **study hall** and not from academic classes.



# LAKE CENTRAL HIGH SCHOOL 2021-2022 COURSE SELECTION SHEET

R= Required Course    Q= Quantitative Reasoning Course    D=Dual Credit    \* Fine Art    (s)=Semester Course  
 W=Word Based Learning    S=Service Based Learning    P= Project Based Learning

Honors				AP			
CORE COURSES							
<b>ENGLISH</b>						Grade Level	
English 9	R			9			
English 9 with Lab				9			
English 9 Honors				9			
English 10	R			10			
English 10 with Lab				10			
English 10 Honors				10			
English 11	R			11			
AP English 11 Language & Comp				11			
AP English 12 Literature & Comp				12			
Composition	R	D		12			
World Literature	R			12			
Speech & Communication				12			
Film Literature				10	11	12	
English as a New Language				9	10	11	12
<b>MATHEMATICS</b>						Grade Level	
Algebra I	R			9			
Algebra I with Lab				9			
Geometry	R			10			
Geometry with Lab				10			
Geometry Honors				9	10		
Algebra II	R			10	11	12	
Algebra II Honors				9	10	11	12
Pre-Calculus (s)	D			10	11	12	
Trigonometry (s)	D			10	11	12	
Pre-Calculus/Trigonometry Honors	D			10	11	12	
AP Calculus AB	Q	D		11	12		
AP Calculus BC	Q	D		11	12		
Statistics (s)				11	12		
AP Statistics	Q	D		11	12		
<b>PHYSICAL EDUCATION</b>						Grade Level	
Secondary Phys Ed I/II Aquatic Fit (s)	R			9			
Secondary Phys Ed I/II Gym (s)	R			9			
Physical Conditioning				10	11	12	
Sports Conditioning				10	11	12	
Life Saving & Water Safety (s)	W			10	11	12	
Lifetime Fitness (s)				10	11	12	
Health Education (s)	R			10	11	12	
Lifeguarding	S			10	11	12	
Advanced Life Saving (s)	W			10	11	12	
Intro to Sports Medicine (s)	W			10	11	12	
Swimming for Fitness				10	11	12	
Core Conditioning				10	11	12	
<b>SCIENCE</b>						Grade Level	
Biology	R			9			
Biology Honors				9			
AP Biology				10			
Principles of Biomedical Science - PLTW	P			9	10		
Human Body Systems- PLTW	P			10	11		
Medical Interventions- PLTW	P				11	12	
Chemistry	R	Q		10	11	12	
Chemistry Honors	Q			10	11	12	
Chemistry I Honors ACP	Q	D		10	11	12	
Chemistry II Honors	Q			11	12		
AP Chemistry (2 class periods)	Q			11	12		
Earth Space Science				10	11	12	
Integrated Chemistry Physics	Q			10	11	12	
Physics	Q			10	11	12	
AP Physics I	Q			11	12		
AP Physics C	Q			11	12		
Anatomy & Physiology Honors - ACP	D			11	12		
Environmental Science (S)				10	11	12	
AP Environmental Science	Q			10	11	12	
Forensics (s)				11	12		
Zoology (s)				11	12		
<b>SOCIAL STUDIES</b>						Grade Level	
Geography and History of the World	R			9	10	11	12
AP Human Geography				9	10	11	12
U.S. History	R	D		11			
AP U.S. History				10	11		
U.S. Government (s)	R						12
AP U.S. Government (s)				11	12		
Economics (s)	R	Q					12
AP Macroeconomics(s)	Q						12
AP Microeconomics (s)	Q						12
Topics in History: Contemporary U.S. History(s)	P					11	12
Psychology (s)				10	11	12	
AP Psychology				10	11	12	
Sociology (s)				10	11	12	
Ethnic Studies (s)				9	10	11	12
Indiana Studies (s)				9	10	11	12
<b>INTERDISCIPLINARY</b>						Grade Level	
AP Seminar	P					11	
AP Research	P						12

# LAKE CENTRAL HIGH SCHOOL 2021-2022 COURSE SELECTION SHEET

R= Required Course Q= Quantitative Reasoning Course D=Dual Credit \* Fine Art (s)=Semester Course

W=Word Based Learning S=Service Based Learning P= Project Based Learning

## Honors

ART				Grade Level			
2D Art I* (s)				9	10	11	12
2D Art II* (s)				9	10	11	12
2D Art III/IV					10	11	12
2D Art V/VI						11	12
AP 2D Art and Design	P						12
3D Art I (s)				9	10	11	12
3D Art II (s)				9	10	11	12
3D Art III/IV					10	11	12
Ceramics I (s)				9	10	11	12
Ceramics II (s)				9	10	11	12
Ceramics III/IV	P				10	11	12
AP 3D Art and Design	P						12

COMMUNICATIVE ART				Grade Level			
Student Media*	P				10	11	12
Student Media Honors (2 Periods)*	P					11	12
Theatre Arts*	P			9	10	11	12
Theatre Arts II*	W	P			10	11	12
Theatre Production Management	W	P		9	10	11	12
Journalism: Publication Design (s)				9	10	11	12
Journalism: Writing (s)				9	10	11	12
Photography* (s)				9	10	11	12
Public Relations	P					11	12

## WORLD LANGUAGES

WORLD LANGUAGES				Grade Level			
French I, II				9	10	11	12
French III Honors	P					11	12
French IV Honors	P						12
German I, II				9	10	11	12
German III Honors							11
German IV Honors							12
Spanish, I, II, III, IV				9	10	11	12
Spanish III Honors							11
Spanish IV Honors							12

## AP

### ARTS

MUSIC				Grade Level			
Junior Treble Choir*	P			9	10	11	12
Senior Treble Choir*	P				10	11	12
Varsity Choir*	P			9	10	11	12
Concert Choir*	P				10	11	12
Symphonic Band*	P			9	10	11	12
Concert Band*	P				10	11	12
Wind Ensemble*	P				10	11	12
Percussion Ensemble*	P			9	10	11	12
Jazz Ensemble*	P			9	10	11	12
Electronic Music*(s)				9	10	11	12
Music Theory* (s)				9	10	11	12
AP Music Theory						10	11
Music History/Appreciation*(s)				9	10	11	12
Hand Bells I*	P			9	10	11	12
Hand Bells II*	P				10	11	12
Introduction to Guitar* (s)				9	10	11	12

## CAREER AND TECHNICAL EDUCATION

CAREER AND TECHNICAL EDUCATION				Grade Level			
Intro to Engineering Design PLTW		D		9	10	11	12
Principles of Engineering PLTW	Q	D			10	11	12
Civil Engineering Architecture PLTW	Q	D				11	12

# LAKE CENTRAL HIGH SCHOOL 2021-2022 COURSE SELECTION SHEET

R= Required Course Q= Quantitative Reasoning Course D=Dual Credit \* Fine Art (s)=Semester Course

W=Word Based Learning S=Service Based Learning P= Project Based Learning

Honors	AP
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## CAREER AND TECHNICAL EDUCATION

BUSINESS			Grade Level			
Introduction to Business	P		9	10	11	12
Entrepreneurship and New Ventures Capstone	P	D		10	11	12
Advanced Business Management	D			10	11	12
Business Management	D			10	11	12
Accounting Fundamentals			9	10	11	12
Advanced Accounting	Q	S		10	11	12
Digital Apps and Responsibility I (s)	D		9	10	11	12
Digital Apps and Responsibility II (s)			9	10	11	12
Web Design (s)			9	10	11	12
Computer Illustration and Graphics (s)				10	11	12
Business Law and Ethics (s)	D			10	11	12
Personal Finance and Responsibility (s)	R	Q			11	12
Marketing Fundamentals	D		9	10	11	12
Strategic Marketing	D				11	12
Merchandising (Fashion)			9	10	11	12
Sports & Entertainment Marketing			9	10	11	12
Preparing for College and Careers (s)			9			
Computer Science I	Q	D	9	10	11	12
Computer Science II	Q	D	9	10	11	12
Cybersecurity PLTW	Q	P		10	11	12
AP Principles of Computer Science	Q		9	10	11	12
AP Computer Science A	Q			10	11	12

FAMILY & CONSUMER SCIENCE			Grade Level			
Nutrition & Wellness I (s)	P		9	10	11	12
Advanced Nutrition & Wellness (s)	P		9	10	11	12
Adv. Nutrition & Wellness: Baking (s)	P		9	10	11	12
Human Dev. & Family Wellness (s)	P		9	10	11	12
Human and Social Services I	P				11	12
Human and Social Services II	P					12
Housing & Interior Design Careers (s)	P		9	10	11	12
Intro to Culinary Arts & Hosp. Mgmt	P			10	11	12
Child Development & Parenting (s)			9	10	11	12
Adv. Child Development (s)	P		9	10	11	12
Intrapersonal Relationships (s)	P		9	10	11	12

TECHNICAL EDUCATION				Grade Level			
Graphic Design and Layout				9	10	11	12
Graphic Imaging Tech (3 Periods)	D	P			10	11	12
Introduction to Manufacturing				9	10	11	12
Precision Machine (3 Periods)	Q	D	P		10	11	12
Introduction to Transportation				9	10	11	12
Auto Services Technology I PM (3 pds)	D	P			10	11	12
Auto Services Technology II AM (3 pds)	D	P				11	12
Don Roberts Cosmetology (4 pds)	P					11	12

MISCELLANEOUS				Grade Level			
Peer Mentoring	S			9	10	11	12
Peer Tutoring	S					11	12
Education Professions	W					11	12
College Course (Off Campus)							12
Study Hall (no credit)				9	10	11	12
Community Service (no credit)	S						12
Work Based Learning (3 periods)	W					11	12
Emergency Medical Services-Franciscian	W						12
Independent Research							12

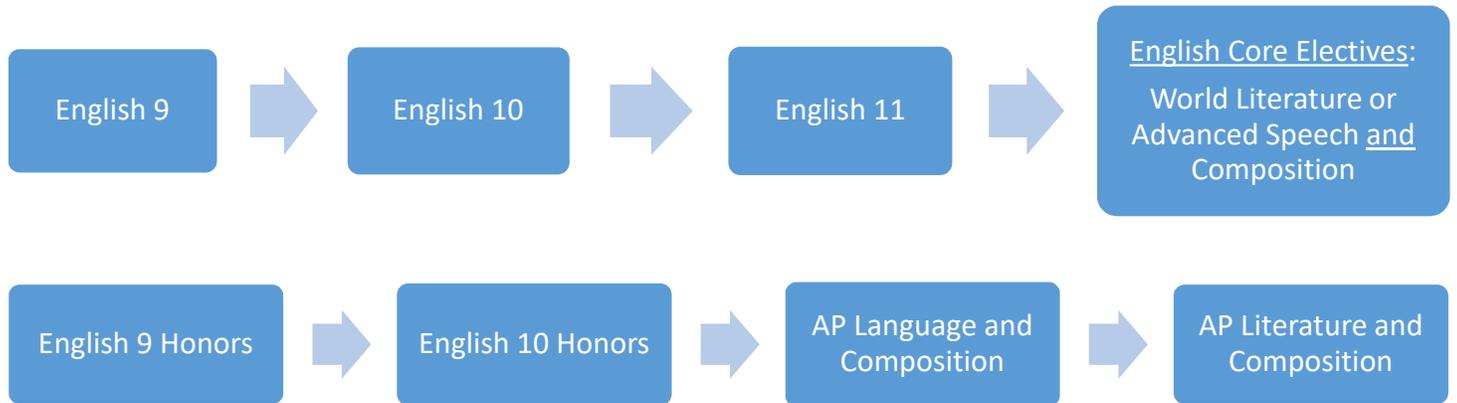
AREA CAREER CENTER (4 PERIODS)				Grade Level			
Auto Technology	W					11	12
Collision & Refinishing Technology	W					11	12
Computer Information Technology	W					11	12
Construction Technology	Q	W				11	12
Criminal Justice and Law	W					11	12
Culinary & Pastry Arts Sciences	W					11	12
Dental Assisting	W					11	12
Digital Imaging and Design	W					11	12
Early Childhood Education Services	W					11	12
Emergency Medical Services	W					11	12
Eng PLTW Adv. Manufacturing	W					11	12
Health Careers I and II	W					11	12
Multimedia Editing and Production	W					11	12
Welding	W					11	12

# COURSE DESCRIPTIONS

Please keep in mind that these courses are subject to change based on funding, participation of students and teacher licensing.

## ENGLISH

### ENGLISH Course Sequencing



#### English 9 (E10020)

**2 semesters, 2 credits**

Usage, composition, vocabulary and literature are integrated into a one-year college prep program. Usage focuses on the grammar and mechanics of writing. Composition involves the writing process. Various types of writing are taught. The literature component has textbook selections, as well as longer works. Vocabulary is taught both as part of the reading selections and as well as additional Latin roots. Students write and deliver grade-appropriate oral and multimedia presentations.

#### English 9 Honors (E1002H)

**2 semesters, 2 credits**

English 9 Honors is an accelerated curriculum. It involves a more in-depth study of various units than the general curriculum. Grammar study focuses on the grammar and mechanics of writing. Composition involves the writing process. Various types of writing are taught. A genre approach is used for literature and longer works, as well as poetry, nonfiction, informational text and short stories, are read. Vocabulary is taught both as part of the reading selections and as a separate entity. Students write and deliver grade-appropriate oral and multimedia presentations. This course has required Summer Reading. Required book: *A Raisin in the Sun*, Lorraine Hansberry and choose ONE of the following books *The Memory Keeper's Daughter* by Kim Edwards, *Columbine* by Dave Cullen, *Where the Crawdads Sing* by Delia Owens, or *North of Happy* by Adi Alsaid.

#### English 10 (E10040)

**2 semesters, 2 credits**

Usage, composition, vocabulary, and literature are integrated into a one-year college prep program. Usage focuses on the grammar and mechanics of writing. Composition involves the writing process. Various types of writing are taught. The literature component has textbook selections, as well as longer works. Vocabulary is taught both as part of the reading selections and as well as Latin roots. Students write and deliver grade-appropriate oral and multimedia presentations.

#### English 10 Honors (E1004H)

**2 semesters, 2 credits**

Advanced English 10 is an accelerated curriculum. It involves an in-depth study of various units. Usage and grammar focuses on the skills necessary for effective writing. Composition involves the writing process. Various types of writing are taught. The literature component has many works, as well as poetry, non-fiction, and short stories. Vocabulary is taught both as part of the reading selections and as a separate entity. Students write and deliver grade-appropriate oral and multimedia presentations. This course has required Summer Reading. Required book: *Things Fall Apart* by Chinua Achebe and choose ONE of the following books: *The Secret Life of Bees* by Sue Monk Kidd, *The Curious Incident of the Dog in the Night-Time* by Mark Haddon, *The 57 Bus* by Dashka Slater, or *Hotel on the Corner of Bitter and Sweet* by Jamie Ford.

**English 11 (E10060)****2 semesters, 2 credits**

Usage, composition, vocabulary, and American literature are integrated into a one-year college prep program. Mastery of standard language conventions is stressed in this course. Composition is taught as a process with various types of writing characteristics. Vocabulary is taught both as part of the selections and as a separate entity. American literature is studied chronologically. Students write and deliver grade-appropriate oral and multimedia presentations.

**AP English 11****Language and Composition (E10560)****2 semesters, 2 credits**

This class focuses on material and skills appropriate for the AP Language and Composition test. Students will analyze a variety of fiction and nonfiction texts (with a greater emphasis based on nonfiction) as a means to develop their own voices in their own writing. AP is a cooperative educational endeavor between secondary schools and post-secondary institutions. Administered by the College Board, the AP program provides capable students the opportunity to earn college credit. Required Summer Reading: *The Things They Carried* by Tim O'Brien and one book of fiction and one book of nonfiction of choice from a list provided by the AP 11 instructors.

**AP English 12****Literature and Composition (E10580)****2 semesters, 2 credits****Recommended: Must have passed English 11**

This class focuses on the knowledge and skills appropriate for the AP Literature and Composition test. The literature component focuses on an in-depth chronological study of British literature. Students study composition as a process and write a variety of papers. Mastery of language conventions is expected. Vocabulary is studied both as part of the reading and as a separate entity. Students write and deliver grade-appropriate oral presentations. AP is a cooperative educational endeavor between secondary schools and postsecondary institutions. Administered by the College Board, the AP program provides capable students the opportunity to pursue college-level studies while still in high school. The AP test, which is given in May, affords the opportunity to earn college credit. Required Summer Reading: *The Great Train Robbery*, Michael Crichton and view the movie *Castaway*; Tom Hanks, featured performer.

**Composition (E10900) Or Composition Dual Credit (E1090D)****1 semester, 1 credit****Dual Credit: ENG 104 Purdue University Northwest**

This course focuses on the writing skills necessary for college-bound students. Students master language conventions. Composition is taught as a process, and various types of writing and their characteristics are taught. Students also study vocabulary as well as additional Greek roots. Models of effective writing are read and analyzed. Students write and deliver grade-appropriate oral presentations. Juniors and seniors may be eligible to take this course as dual credit through Purdue University Northwest and earn college credit while satisfying the Indiana state requirements. \*In addition to a writing class, each student must successfully complete World Literature or Advanced Speech.

**World Literature (E10520)****1 semester, 1 credit**

World literature surveys literature written by major authors of the Western and Eastern worlds. This course takes an analytical approach to literary works produced by writers of various cultures and nationalities. Consistent reading, formal and informal writing, discussion, vocabulary, and Greek words are part of this college prep course. NOTE: seniors may take Speech and Communication in lieu of a semester of World Literature.

**Speech and Communication (E10780)****1 semester, 1 credit**

Speech is a one-semester elective course. Emphasis will be placed on advanced public address and critical listening. Students will present informative, demonstration, persuasive and impromptu speeches. This course will examine both interpersonal and intrapersonal communication. NOTE: seniors may take this course in lieu of a semester of World Literature.

**Film Literature (E10340)****1 semester, 1 credit****Recommended: English 10**

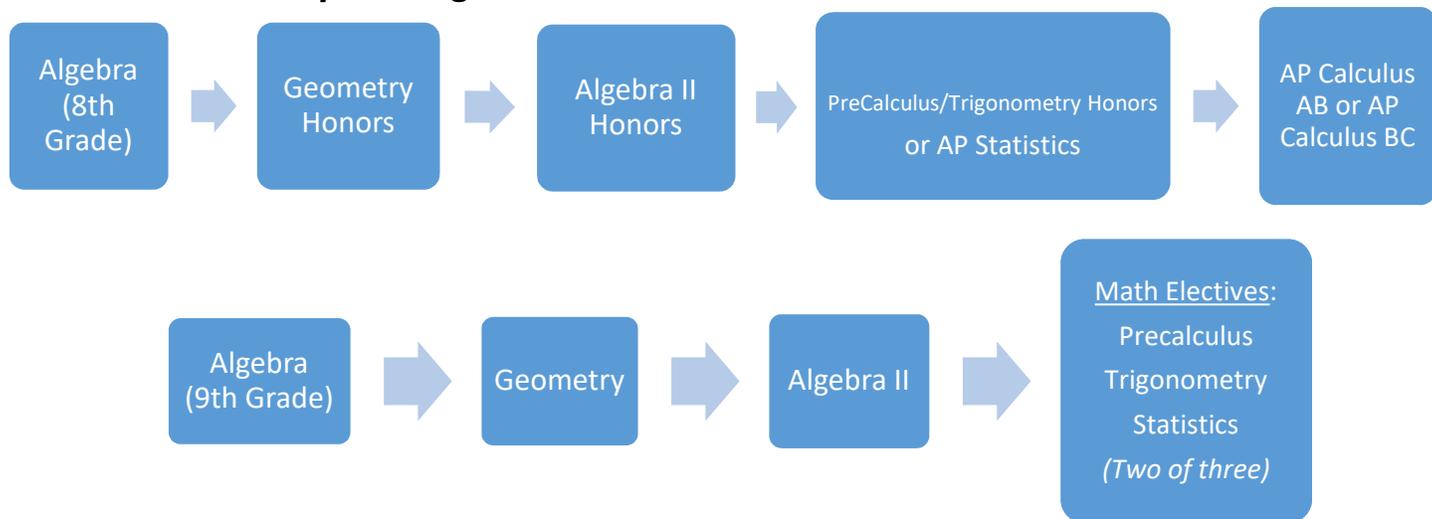
Film Literature, a course based on Indiana's Academic Standards for English/Language Arts and the Common Core State Standards for English/Language Arts, is a study of how literature is adapted for film or media and includes role playing as film directors for selected screen scenes. Students read about 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.

**English as a New Language (E10120)****2 semesters, 2 credits**

This course is designed for students who have been in the U.S. fewer than four years. English as a New Language (ENL) provides ENL students with instruction in English to improve their proficiency in listening, speaking, reading, and writing. Emphasis is placed on helping students function within the regular school setting and within an English-speaking society. Students are placed in this class by recommendation only.

# MATHEMATICS

## MATH Course Sequencing



### Algebra I (M25200)

**2 semesters, 2 credits**

This class is the foundation course for the development of algebraic skills and concepts necessary to succeed in advanced courses. This course covers computing with real numbers, solving first and second degree equations, factoring, graphing, and solving systems of equations. This course provides for the use of algebraic skills in a wide range of problem solving situations

### Geometry (M25320)

**2 semesters, 2 credits**

**Recommended: Algebra I**

Geometry should provide students with experiences that help them understand geometric shapes and their properties. Deductive and inductive reasoning, investigative strategies in drawing conclusions, and an understanding of proof and logic will be used. Properties and relationships of lines, angles, planes, congruent and similar triangles, trigonometric ratios, polygons, and circles will be explored.

### Geometry Honors (M2532H)

**2 semesters, 2 credits**

**Recommended: Grade of A or B in Algebra I**

Geometry Honors will provide students with experiences that deepen the understanding of geometric shapes and their properties. Deductive and inductive reasoning as well as investigative strategies in drawing conclusions will be stressed. Properties and relationships of lines, angles, planes, congruent and similar triangles, trigonometric ratios, polygons, and circles will be explored. An in-depth understanding of proof and logic will be developed.

### Algebra II (M25220)

**2 semesters, 2 credits**

**Recommended: Geometry and Algebra I**

This course includes a review of Algebra I and an expansion of the topics covered in Algebra I. This course covers relations, functions, polynomials, algebraic fractions, logarithmic and exponential functions, sequences and series, counting principles and probability. Solving higher degree equations and inequalities, and applications of math to science will also be included.

**Algebra II Honors (M2522H)****2 semesters, 2 credits****Recommended: Geometry Honors or Geometry with teacher recommendation**

This course is for college-bound students who can learn at a faster pace. The course accomplishes the objectives of Algebra II and also includes the study of parabolas, greatest integer functions, absolute value functions, and polynomial functions. An introduction to determinants, logarithms and exponential functions, probability, permutations, combinations, and series and sequences is included. In certain situations, this course may be taken concurrently with Geometry Honors. Classroom TI83 graphing calculators are used.

**Pre-Calculus (M25640) Or Pre-Calculus Dual Credit (M2564D)****1 semester, 1 credit****Dual Credit: Math 136 Ivy Tech****Recommended: Algebra II - C or higher**

This course is designed to further teach certain topics taught in Algebra II Honors but not taught in Regular Algebra II. A review of Algebra II topics is followed by an extensive study of polynomial functions including graphing, domain, range, transformations, relative maximum/minimums, and solving for real and imaginary solutions. The class also includes sequences and series, exponential and logarithmic functions, and an emphasis on conic sections including circles, parabolas, ellipses, and hyperbolas. A TI83 or higher graphing calculator is used.

**Pre-Calculus/Trigonometry Honors (M2564H)****2 semesters, 2 credits****Dual Credit: MATH 136 and MATH 137 Ivy Tech****Recommended: Algebra II Honors**

This course is designed for college-bound students who can learn at a faster pace. A review of Algebra II Honors topics is followed by a study of polynomial functions. An extensive look at trigonometry is included. This study includes a rigorous look at the trigonometry topics listed above. A study of the conic sections listed above is also included. A study of matrices and determinants, sequences and series, and permutations and combinations is also included. A TI83 or higher graphing calculator is used.

**Trigonometry (M25660) Or Trigonometry Dual Credit (M2566D)****1 semester, 1 credit****Dual Credit: MATH 137 Ivy Tech****Recommended: Algebra II**

Trigonometry provides students with the skills and understandings that are necessary for advanced manipulation of angles and measurement. Trigonometry provides the foundation for common periodic functions that are encountered in many disciplines, including music, engineering, medicine, and finance (and nearly all other STEM disciplines). 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. A TI83/TI84 or higher graphing calculator are required. No TI30, TI36, or Casio calculator will be allowed on any assessment.

**AP Calculus AB (M25620)****2 semesters, 2 credits****Quantitative Reasoning Course****Dual Credit: MATH 211 Ivy Tech****Recommended: Pre-Calculus/Trig Honors**

AP Calculus AB introduces the topics of differential and integral calculus of a single variable. This course is equivalent to 20 weeks of college calculus. Major topics to be covered: limits and continuity, derivative formulas, detailed graphing and analysis of functions, applications of calculus concepts to real-world story problems, integration formulas, area under a curve, volume of solids, and trigonometric, exponential, and logarithmic applications. Students taking this course will be required to have a graphing calculator (TI 84 preferred). The curriculum is aligned to the College Board guidelines, with actual AP questions used as a guide. This course prepares the student to take the AP Calculus AB exam in May. A student may be rewarded one semester of college credit based on their exam score. Credit is awarded at the discretion of the college.

**AP Calculus BC (M25720)****2 semesters, 4 credits****Quantitative Reasoning Course****Dual Credit: MATH 211& MATH 212 Ivy Tech****Recommended: Pre-Calculus/Trig Honors and teacher recommendation**

AP Calculus BC is an extension of AP Calculus AB. This course is equivalent to 30 weeks of college calculus. It includes all the topics listed for AP Calculus AB plus advanced integration techniques, solving logistic differential equations, polynomial approximations and series, and parametric, polar and vector functions applications. Students taking this course will be required to have a graphing calculator (TI 84 preferred). The curriculum is aligned to the College Board guidelines, with actual AP questions used as a guide. This course prepares the student to take the AP Calculus BC exam in May. A score will be received for the AP Calculus BC exam as well as a score for the AP Calculus AB exam. A student may be rewarded one or two semesters of college credit based on their exam score. Credit is rewarded at the discretion of the college. This course is double-blocked and meets daily.

**Probability and Statistics (M25460)****1 semester, 1 credit****Recommended: Algebra II**

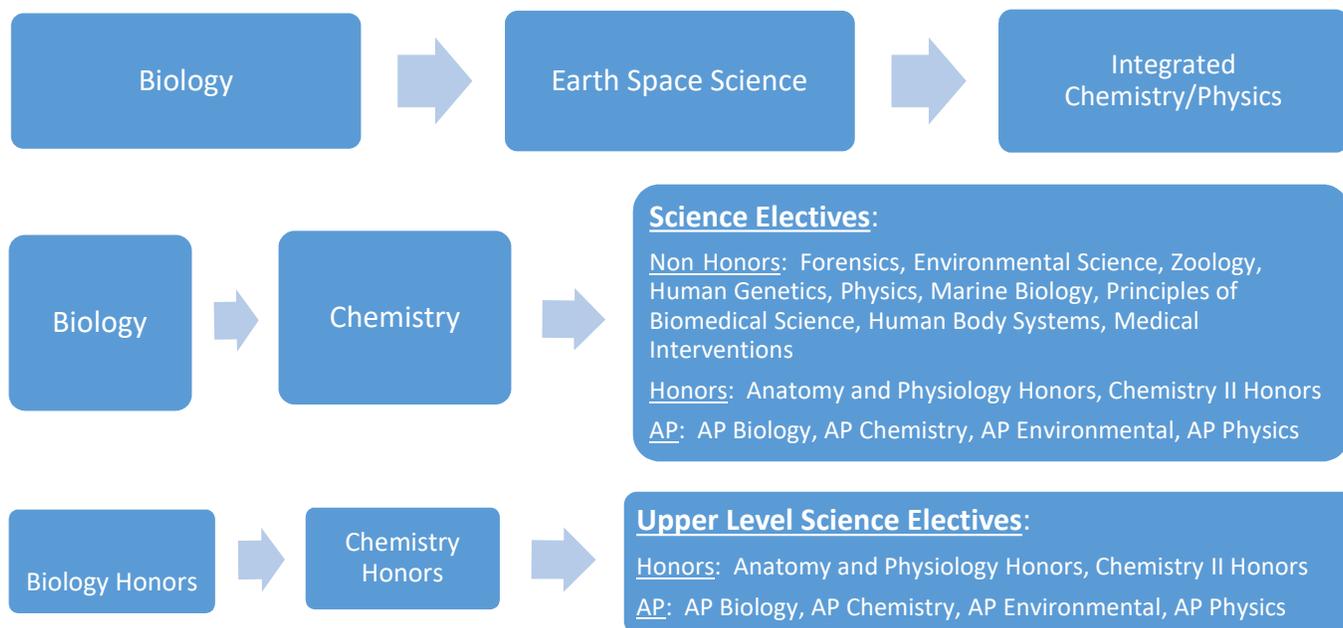
This course is intended for students who desire a mathematics course which applies statistical techniques and probability in decision-making process. Topics include methods of data collection, organization of data, presentation and graphing of data, hypothesis testing, making inferences from experimental data, descriptive analysis, probability, and probability distributions. Practical examples based on real experimental data, experiments, surveys, and the analysis of the resulting data are stressed. The course may be taken concurrently with Pre-Calculus/Trig or Calculus.

**AP Statistics (M25700)****2 semesters, 2 credits****Quantitative Reasoning Course****Recommended: Algebra II Honors**

This course is a more in-depth study of statistics to prepare the student to take the AP exam in May. The curriculum is aligned to the College Board guidelines. This includes four major themes, which are: exploratory analysis, planning and conducting a study, probability, and statistical inference. The use of computer software and graphing calculator technology will be an integral part of the course. Students taking this course will be required to have a TI-83, TI-83+ or TI-84 graphing calculator.

## SCIENCE

### SCIENCE Course Sequencing



ACP= Advanced College Project

#### Biology I (S30240)

**2 semesters, 2 credits**

Biology I is a required Core 40 science course for all Indiana students. The course will explore topics in biochemistry (elements and compounds as they relate to living organisms), cell structure, developmental biology, organism structure and system regulation, genetics, ecology and evolution. Course activities include lecture, lab activities, video presentations, demonstrations and student projects. Students will be required to complete the Core 40 test as prescribed by the state of Indiana as part of the assessment activities.

#### Biology I Honors (S3024H)

**2 semesters, 2 credits**

**Recommended: Grade of A or B in Adv. Science 8**

Biology Honors functions as a Biology course in life sciences and is designed to help prepare students to take AP Biology. It is recommended for those who want a more challenging and in depth course than would be offered in Biology I. The course will explore topics in biochemistry (elements and compounds as they relate to living organisms), cell structure, developmental biology, organism structure and system regulation, genetics, ecology and evolution. In addition, there is an in-depth study of selected biological topics, with an emphasis on the molecular aspects of biology throughout the course. Course activities include lecture, inquiry-based lab activities, video presentations, demonstrations and student projects. Students will be required to complete the Core 40 test as prescribed by the state of Indiana as part of the assessment activities.

**AP Biology (S30200)****2 semesters, 2 credits****Quantitative Reasoning Course****Recommended: Biology I Honors and Algebra II Honors with grades of B or better, Honors Chemistry with grade B or better and****Concurrent Enrollment in Algebra II Honors or higher****Minimal Concurrent Enrollment: Chemistry Honors and Geometry Honors**

Advanced Placement Biology is a rigorous course equivalent to first-year college biology. College credit may be earned by passing the AP Biology exam with a score of 3, 4, or 5. The course builds on topics covered in Biology and adds more in-depth study of the biochemical aspects of biology, as well as topics in population biology and ecology. AP Biology is conducted at an elevated pace requiring additional classroom time. Students are expected to have strong mathematical skills and work ethic. This course is intended for the college bound student who plans to major in the sciences and needs a strong background in biology. Such students are typically considering exploring a career that requires acceptance into a graduate level professional college, such as medical, veterinary or dental school. Students will complete a test in May that may be used by colleges to award credit in college level biology. The exam is paid for by the state of Indiana. Juniors and seniors may be eligible to earn three college credits by taking this course.

**Chemistry I (S30640)****2 semesters, 2 credits****Quantitative Reasoning Course****Recommended: Biology I and Algebra I****Concurrent Enrollment: Geometry or Algebra II**

Chemistry I is a Core 40 class and deals with topics such as matter, atomic structure, chemical bonding, radioactivity, chemical composition, reactions, behavior of gases and acids/bases. Laboratory experiments reinforce concepts and principles discussed in the classroom. Mathematical principles and problem solving skills are applied to many concepts. This course will provide the student with an adequate background for enrollment in college level chemistry.

**Chemistry Honors (S3064H) Or Chemistry I Honors (ACP) (S30901)****2 semesters, 2 credits****Dual credit optional: C101 and C121 at Indiana University****Quantitative Reasoning Course****Recommended: Biology I, Algebra I, and Geometry with grades of B or better or teacher recommendation from Biology I**

Chemistry I Honors is a Core 40 class and includes the topics covered in Chemistry I but to a greater depth. The course is conducted at an elevated pace, and students are expected to have a strong command of mathematical problem solving skills. This course is intended for the college bound student who plans to major in the sciences and needs a strong background in chemistry. Honors Chemistry can be taken with extra laboratory requirements for dual credit through Indiana University, for this option select Chemistry Honors ACP-1.

**Chemistry II Honors (ACP) (S30902)****2 semesters, 2 credits****Quantitative Reasoning Course****Dual Credit is available for this course through IUN.****Recommended: Chemistry I Honors (B or better) Algebra II Honors****Concurrent Enrollment: Pre-Calculus/Trig**

This course will cover the following topics: components of matter, calculations, chemical reactions, gases, thermo chemistry, atomic structure, electron configurations and periodicity, bonding and molecular geometry, and intermolecular forces. The second semester of the course will also include an introduction to organic chemistry (the study of carbon compounds) so students can register for second semester only. Topics will include the naming of organic compounds, analysis of their structures, and an introduction to the reactions which are basic to all organic compounds. Laboratory experiments will be used to a great extent in this course.

## AP Chemistry (S30600)



Scan the QR Code to learn more about this course.

**2 semesters, 4 credits**

**Quantitative Reasoning Course**

**Recommended: Chemistry Honors with a grade of B or better or teacher recommendation from Chemistry**

**Concurrent Enrollment: Pre-Calculus/Trig Honors or AP Calculus**

Advanced Placement Chemistry is a rigorous, calculation-based, lab-intensive course equivalent to first-year college chemistry. College credit may be earned by passing the AP Chemistry exam with a 4 or 5. This course builds on topics covered in Chemistry and adds solutions, equilibrium, kinetics, thermodynamics, organic chemistry, and chemical reactivity. AP Chemistry is conducted at an elevated pace requiring additional classroom time. Students are expected to have strong mathematical skills and work ethic. This course is intended for the college bound student who plans to major in the sciences and needs a strong background in chemistry. Students will complete a test in May that may be used by colleges to award credit in college level chemistry. This exam is typically paid for by the state of Indiana. This course is double-blocked and meets for two consecutive periods.

## Earth & Space Science (S30440)

**2 semesters, 2 credits**

**Recommended: Selection process**

Earth and Space Science I is a course focused on the following core topics: study of the earth's layers; atmosphere and hydrosphere; structure and scale of the universe; the solar system and earth processes. Students analyze and describe earth's interconnected systems and examine how earth's materials, landforms, and continents are modified across geological time. Instruction should focus on developing student understanding that scientific knowledge is gained from observation 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 is designed to support sophomore students with limited math and will transition students into Integrated Chem/Physics (ICP) their junior year. (Note: This is not considered a lab science for PWL and IUB.)

## Integrated Chemistry-Physics (S31080)

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: Biology I**

Integrated Chemistry-Physics is a Core 40 course intended for the student planning to attend a technical school or college with intent to major in a non-science area. This course is intended for students who are not going to take, or are not yet ready, for Chemistry I. All concept material is reinforced through a hands-on laboratory exercise or activity to model skills that the students will need to apply moving forward. 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. The following core topics: motion and energy of macroscopic objects; chemical, electrical, mechanical and nuclear energy; properties of matter; transport of energy; bonding; reactions; magnetism; energy production and its relationship to the environment and economy.

## Physics I (S30840)



Scan the QR code for more information about this course.

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: Biology, Alg. I, and Geometry with grades of C or better.**

**Concurrent enrollment: Algebra II**

This course offers a conceptual approach to all aspects of physics, with less emphasis on the mathematical aspects. Problem solving skills will be utilized during the course. It includes the study of vectors, mechanics, heat, light, sound, electricity, and magnetism. This course is highly recommended for college bound students who plan to major in a science related area.

## AP Physics 1: Algebra-Based (S30800)



Scan the QR code for more information about this course.

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: Algebra II (Prerequisite per College Board)**

AP Physics 1 is the equivalent of a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It also introduces electric circuits. The course will prepare students for taking the College Board Entrance Examination tests, Physics 1. It is also a college preparatory course intended for future science and/or engineering majors. The content covered in this course will mirror content discussed in the first semester of most college Physics courses.

## AP Physics C (S30880)



Scan the QR code for more information about this course.

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: AP Physics I and Calculus AB or BC**

AP Physics C is a Calculus-based Physics class that is taught over two semesters. Mechanics course is equivalent to a one-semester, calculus-based, college-level physics course. The course explores topics such as kinematics; Newton's laws of motion; work, energy and power; systems of particles and linear momentum; circular motion and rotation; and oscillations and gravitation. Introductory differential and integral calculus is used throughout the course. At the conclusion of this class, students will take the AP Physics C: Mechanics test for college credit.

## Principles of Biomedical Science- PLTW (S52180)



Scan the QR code for more information about this course.

**2 semesters, 2 credits**

**Recommended: Biology I or Concurrent Enrollment**

PLTW Principles of 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.

## Human Body Systems- PLTW (S52160)

**2 semesters, 2 credits**

**Recommended: Principle of Biomedical Science**

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. Student use appropriate software to design and build systems to monitor body functions.

## Medical Interventions- PLTW (S52170) – *New Course for 21-22 School Year*

**2 semesters, 2 credits**

**Recommended: Principle of Biomedical Science and Human Body Systems**

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

## Anatomy & Physiology Honors (ACP) (S5276H)

**2 semesters, 2 credits**

**Dual Credit: Bio P130/N213 Indiana University Bloomington**

**Recommended: Biology and Chemistry (grades of B or better recommended for all classes)**

This course is an in-depth study of the human body in anatomy (structure) and physiology (function). All of the major body systems will be covered, as well as pathological conditions that can affect them. Classroom work is supplemented with laboratory exercises encompassing both analysis and dissections, including dissections of rats, fetal pigs, and various body organs. When possible the class will attend a field trip to a medical school cadaver laboratory. The course will be beneficial to those students who will need to take anatomy as a Recommended for acceptance into a graduate level program or as a requirement for a degree in healthcare or medical field such as nursing, allied health, physical therapy, medicine or dentistry. Juniors and Seniors may be eligible to earn 5 college credits by taking this course. (P130 Human Biology – 4 credits and N213 Human Biology Lab – 1 credit)

### **Environmental Science (S30100)**

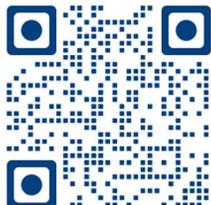
**1 semester, 1 credit**

#### **Quantitative Reasoning Course**

**Recommended: Biology and Chemistry**

Environmental Science is an elective that should be taken by any student that has successfully passed biology and chemistry. Any 10<sup>th</sup> grade student interested in taking this course should talk to their current science instructor for a recommendation to take this class. This class has many labs, projects, and uses technology in a variety of ways. Students are expected to read many scientific articles and research a variety of environmental issues and topics and be able to discuss their findings. This course uses knowledge from many scientific disciplines and ties it to how humans influence the environment.

### **AP Environmental Science (S30120)**



**Scan the QR code for more information about this course.**

**2 semesters, 2 credits**

#### **Quantitative Reasoning Course**

**Recommended: Recommended Biology and Chemistry**

Environmental Science, Advanced Placement is a course based on content established by the College Board. Students enrolled in AP Environmental Science investigate the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study, yet there are several major unifying constructs, or themes, that cut across the many topics included in the study of environmental science.

### **Forensic Science: Advanced Science, Special Topics (S3092F)**

**1 semester, 1 credit**

**Recommended: Biology, Chemistry I, Algebra I and Geometry with grades of C or better**

This course will serve as an introduction to forensics and will bring together all of the above sciences and math course topics by giving students the opportunity to apply their knowledge base to real world situations. Students will use hands-on lab experiments and case studies to investigate many aspects of crime scene analysis including crime scene reconstruction, evidence recording and collection, glass analysis, fingerprint analysis, trace hair and fiber analysis, document/handwriting analysis, DNA profiling and serology. Guest speakers in this field will give students a feel for the career opportunities that this area of study provides.

### **Human Genetics: Advanced Science (S3092H)**

**1 semester, 1 credit**

**Recommended: Biology and Algebra I (Grades of B or better recommended)**

This course will explore topics in cell division, development, transmission genetics, molecular genetics, mutation, cancer, genomics, biotechnology, population genetics, and evolution. Moral and ethical issues surrounding new technology will be addressed. Course activities include power point lectures, lab activities, video presentations, demonstrations, simulations, and student projects.

### **Zoology: Advanced Science, Special Topics (S3092Z)**

**1 semester, 1 credit**

**Recommended: Biology with grade of B or better, Rec. of Bio I teacher**

This course will include an overview of the various groups of organisms within the vertebrate phylum of the animal kingdom and will take a comparative anatomy approach to illustrate the differences between major groups within the kingdom. Students will learn lab skills by dissecting representative organisms throughout the course and will complete a research project regarding an endangered species or a specific animal. A strong background in biology is expected as students will build on previously covered life science topics. Due to the extensive amount of time spent in lab activities,

students will need to have demonstrated the ability to work on their own in a responsible manner in a lab setting during prior Science Dept. courses.

**Marine Biology I: Advanced Science, Special Topics – SUMMER COURSE  
(S3092M)**

**1 semester, 1 credit**

**Recommended: Biology I or Biology I Honors, Incoming 10, 11 & 12**

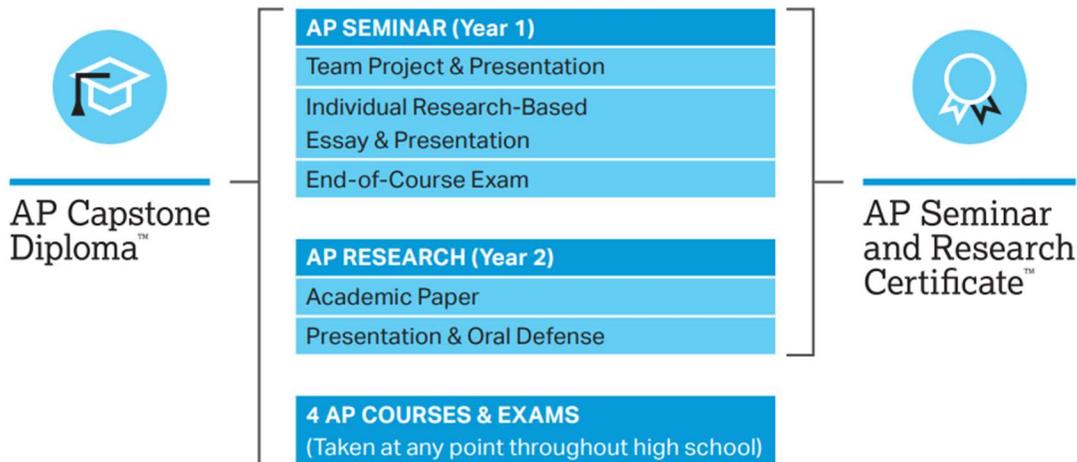
Approximately 18+ hours of classroom instruction will take place two weeks before the trip to Marine Lab. Approximately 70+ hours will be spent in laboratory and other learning situations during the six-day trip to Marine Lab in Florida.

Students must see Mr. J. Correa and fill out an application form in order to be considered for this course.

## INTERDISCIPLINARY – AP CAPSTONE

AP Capstone™ is a diploma program from the College Board. It's based on two yearlong AP courses: AP Seminar and AP Research.

Rather than teaching subject-specific content, these courses develop students' skills in research, analysis, evidence-based arguments, collaboration, writing, and presenting. Students who complete the two-year program can earn one of two different AP Capstone awards, which are valued by colleges across the United States and around the world. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams receive the AP Seminar and Research Certificate.



### AP Seminar (I05520)

**2 semesters, 2 credits**

**Project Based Learning Course, Grade 11**

**Recommended: None**

AP Seminar is an interdisciplinary class based on student-led inquiry. Students will choose to pursue real-world topics and complex issues inspired by their own interests and passions, and will conduct research on those interests. The College Board requires students to analyze multiple perspectives, read a multitude of texts, and synthesize their sources into team and individual oral/visual presentations, after which they will write a research paper to qualify for a passing grade on the AP Seminar Exam. AP Seminar is the first required course that students may take to qualify for the prestigious AP Capstone Diploma. According to the College Board, "Ultimately, [AP Seminar] aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments. Therefore, AP Seminar is a good starting point for anyone interested in the kind of high-level thinking required of college-bound students. This course counts as an Elective for all diploma types.

### AP Research (I05510) – *New Course for 21-22 School Year*

**2 semesters, 2 credits**

**Project Based Learning Course, Grade 12**

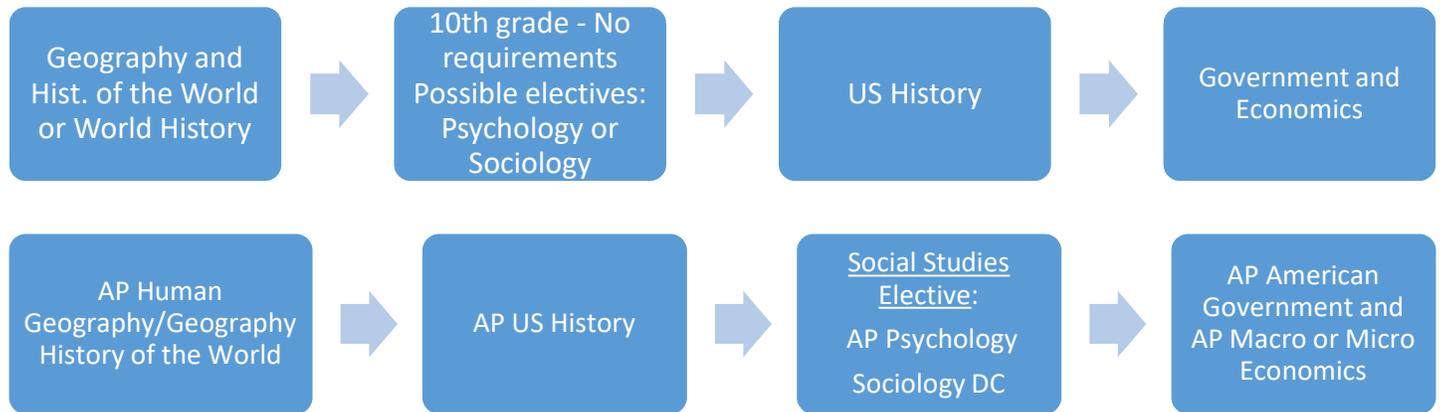
**Required: AP Seminar**

AP Research is the second year foundational interdisciplinary course that is unique to the AP Capstone diploma program. AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan and conduct a yearlong research based investigation to address a research question.

In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their process, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. Students in this course are expected to take the AP Research Exam in May.

## SOCIAL STUDIES

### SOCIAL STUDIES Course Sequencing



#### **Geography History of the World (H15700)**

**2 semesters, 2 credits**

Geography and History of the World is designed to enable students to use the geographical view of looking at the world and to deepen their understanding of major global themes that have manifested themselves over time. Students will learn how geography shaped the history of the world by analyzing how human activities shaped the Earth's surface, gaining knowledge about the people and cultures of the world through a geographic and historical perspective and executing map skills.

#### **AP Human Geography/Geography History of the World (H15720/H15700)**

**2 semesters, 4 credits**

**Recommended: B in English**

Advanced Placement Human Geography/Geography & History of the World focuses on the distribution, processes, and effects of human populations on the planet. The course is designed to prepare students for the AP exam and thus focuses on developing their reading, writing, and critical thinking abilities at a college level. Students are expected to engage with this content through the broad themes of physical geography, population, migration, cultural patterns and processes, political geography, economic development, industry, agriculture, and urban geography. Throughout the course of the school year, students will also be covering topics at a basic geography level to expand their knowledge of AP Human Geography. Students taking this course will have the opportunity to earn 4 credits (2 credits for AP Human Geography and 2 for Geography/History of the World).

#### **U.S. History (H15420) Or U.S. History Dual Credit (H1542D)**



Scan the QR code to learn more about the Dual Credit course.

**2 semesters, 2 credits**

**Dual Credit: HIST 151 and HIST152 Purdue University Northwest (6 credits)**

U.S. History is the study of the United States from the 1850s to today. Emphasis is given to twentieth century events and policies as well as their consequences. This class is required for graduation and must be taken during the junior year. Juniors and Seniors may be eligible to take this course as dual credit through Purdue University Northwest and earn college credit while satisfying the Indiana state requirements. For the U.S. History Dual Credit, the student must have a 3.0 or above GPA.

**AP U.S. History (H15620)****2 semesters, 2 credits****Recommended: AP Human Geog. and/or World History with a B in English**

AP U.S. History is a survey course that rigorously explores the major themes in American history from the colonial era to the present. DBQ (document-based question) tests are given to prepare students for the College Board AP exam in May. This course challenges and develops a student's research, discussion, analytical, and self-directed learning skills. AP U.S. History meets corporation and state standards, as well as following the expectations of the College Board Advanced Placement program.

**U.S. Government (H15400)****1 semester, 1 credit****Recommended: U.S. History**

U.S. Government is the study of the American governmental system. Students who take this class will gain a better understanding of the Constitution, the three branches of the U.S. Government, and the election process at the state and federal levels. Emphasis is placed on the federal government and current national events. This class is required for graduation. Juniors and Seniors may be eligible to take this course as dual credit through Purdue University Northwest and earn college credit while satisfying the Indiana state requirements.

**AP U.S. Government and Politics (H15600)****1 semester, 1 credit****Recommended: U.S. History**

This course is the most advanced study of the American governmental system offered at Lake Central. Students will participate in an in-depth analysis of the integral parts of the American form of democracy through research, group discussions, projects, and critical-thinking exercises. Outside reading assignments will supplement the textbook and exams will be modeled after the AP U.S. Government and Politics Examination. This class satisfies the state and school corporation requirements for U.S. Government.

**Economics (H15140)****1 semester, 1 credit****Quantitative Reasoning Course****Recommended: U.S. History**

Economics is the study of the allocation of limited resources among unlimited needs. In this class, students will study different economic ideologies and their goals, prices, taxes, international trade, and the basics of investing. This course is required for graduation and is recommended to be taken during senior year.

**AP Macroeconomics (H15640)****1 semester, 1 credit****Quantitative Reasoning Course****Recommended: U.S. History**

Students will study macroeconomic concepts and principles throughout the semester in preparation for the College Board's Advanced Placement Examination. This course covers economic concepts that apply to the economic system as a whole. Students will learn how a nation's economic performance is measured and evaluated. Primary emphasis will be in the areas of national performance indicators, such as inflation, employment, GDP and the Fed. Issues of international trade and comparative economic systems will also be examined.

## AP Microeconomics (H15660)



Scan the QR code for more information on this course.

**1 semester, 1 credit**

**Quantitative Reasoning Course**

**Recommended: U.S. History**

Students will study microeconomic concepts and principles throughout the semester in preparation for the College Board's Advanced Placement Examination. This course covers many concepts that apply to individual consumers and firms. The primary emphasis of study will focus on the product market (supply and demand) and the factors market. The government's role in promoting competition and fairness in the market will also be examined. Economic graphs will be constantly examined and applied to concepts explained in this course.

## Psychology (H15320)



Scan the QR code for more information on this course.

**1 semester, 1 credit**

Psychology is the study of human behavior. Students who take this class will gain a better understanding of their own behavior and develop insight into the behavior of others. This course is an introduction to psychology and will provide background that will be useful in college-level courses.

## AP Psychology (H15580)



Scan the QR code for more information on this course.

**2 semesters, 2 credits**

Advanced Placement Psychology is the most advanced study of psychology offered at Lake Central High School. The course is designed for students who want to prepare for the AP Psychology exam. Students will learn many psychological facts, principles, and phenomena associated with each of the major subfields within the study of psychology through research, group discussions, projects, and critical-thinking exercises. Students are to expect a heavy load of reading and writing. This course will meet the state and corporation requirements and follow the expectations of the College Board and Advanced Placement programs.

## **Sociology (H15340)**



**Scan in the QR code to learn more about this course.**

**1 semester, 1 credit**

Sociology is the study of human groups. Emphasis is placed on basic concepts used in sociological study as well as the nature of society, culture, social problems, and various social institutions such as the family, education, and religion. Although this is an elective course it requires participation in class discussion, activities, and students are expected to read the textbook. This course is an introduction to sociology and will provide background that will be useful in college-level courses.

## **Topics in History: Contemporary U.S. History**

**(1945-present) (H15380)**

**1 semester, 1 credit – Project Based Learning Course**

**Recommended: U.S. History**

Topics in History: Contemporary U.S. History is an examination of the political, social, cultural, and intellectual events that shaped America during the last 50 years. The instructor will combine audio, video, lecture, group discussion, and interviews to examine the great watersheds of the last 60 years. The course will begin with the later years of the latter years of WWII and progress to the present.

## **Ethnic Studies (H15160)**

**1 semester, 1 credit**

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.

## **Indiana Studies (H15180)**

**1 semester, 1 credit**

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 role in a democratic society will be included and student will examine the participation of citizens in a political process. Selections from Indiana arts and literature may also be analyzed for insights into historical events and cultural expressions.

## WORLD LANGUAGES

### Level 1 World Languages

**French I (F20200), German I (F20400), Spanish I (F21200)**

**2 semesters, 2 credits**

**Recommended Prerequisite: C or better in previous English course**

Level 1 World Language courses are based on Indiana's Academic Standards for World Languages. They introduce students to effective strategies for beginning language learning and to various aspects of the target language culture. These courses encourage interpersonal communication through speaking and writing, and emphasize the development of reading and listening comprehension skills. Additionally, students will examine the practices, products, and perspectives of the target culture. These courses further emphasize making connections across content areas and the application of understanding the target language and culture outside of the classroom.

### Level 2 World Languages

**French II (F20220), German II (F20420), Spanish II (F21220)**

**2 semesters, 2 credits**

**Recommended Prerequisite: C or better in Level 1 World Language**

Level 2 World Language courses, based on Indiana's Academic Standards for World Languages, build upon effective strategies for language learning by encouraging the use of the language and cultural understanding for self-directed purposes. These courses encourage interpersonal communication through speaking and writing, and emphasize the development of reading and listening comprehension skills. Students will address the presentational mode by presenting prepared material on a variety of topics. Additionally, students will describe the practices, products, and perspectives of the target culture. These courses further emphasize making connections across content areas and the application of understanding the target language and culture outside of the classroom.

### Level 3 World Languages

**French III Honors\*\* (F20240), German III Honors (F2044H), Spanish III Honors (F2124H) Spanish III (F21240)**

**2 semesters, 2 credits –\*\*Project Based Learning Course**

**Recommended Prerequisite: C or better Level 2 World Language**

**Required Prerequisite for Honors: Level 2 World language grade C or better, or teacher recommendation**

Level 3 World Language courses, based on Indiana's Academic Standards for World Languages, build upon effective strategies for language learning by facilitating the use of the language and cultural understanding for self-directed purposes. These courses encourage interpersonal communication through speaking and writing, and emphasize the continued development of reading and listening comprehension skills. Students will address the presentational mode by presenting student-created material on a variety of topics. Additionally, students will continue to develop understanding of the target culture through recognition of the interrelations among the practices, products, and perspectives of the target culture; discussion of significant events in the target culture; and investigation of elements that shape cultural identity in the target culture. This course further emphasizes making connections across content areas, as well as the application of understanding the target language and culture outside of the classroom. Honors level courses are more rigorous than regular level three courses.

### Level 4 World Languages

**French IV Honors\*\* (F20260), German IV Honors (F2046H), Spanish IV Honors (F2126H72410) Spanish IV (F21260)**

**2 semesters, 2 credits - \*\*Project Based Learning Course**

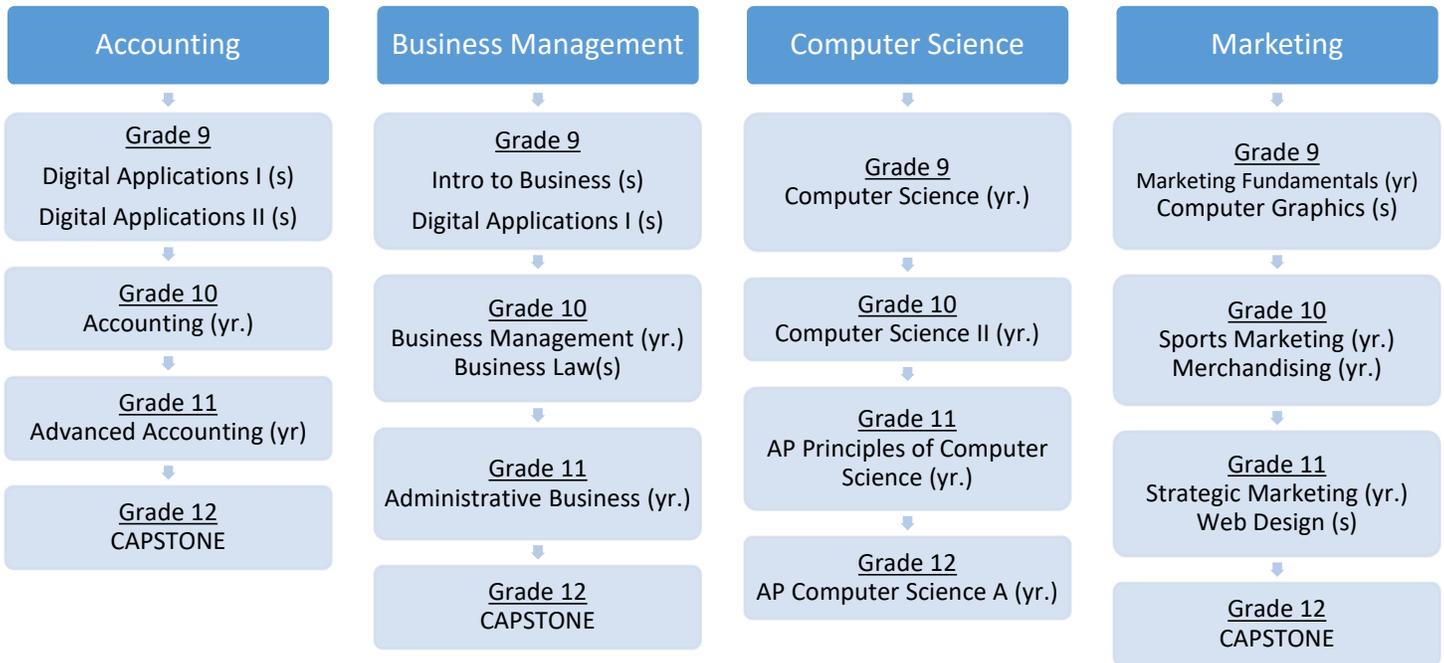
**Recommended Prerequisite: Level 3 World Language**

**Required Prerequisite for Honors: Level 3 World language grade C or better, or teacher recommendation**

Level 4 World Language Courses are based on Indiana's Academic Standards for World Languages. These courses provide 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. Additionally, students will continue to develop understanding of the target culture through explaining factors that influence the practices, products, and perspectives of the target 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 target language and culture in the community beyond the classroom is explored through the identification and evaluation of resources intended for native speakers. Honors level courses are more rigorous than regular level three courses.

# BUSINESS

## Grade 9: Career Exploration PtE



**Dual Credit:** Principles of Business Management, Administrative Office Management, Digital Applications and Responsibility, Principles of Marketing, Strategic Marketing, Business Law and Ethics, Computer Science I, Computer Science II, and AP Computer Science A

**\*\*All Juniors will take Personal Financial Responsibility (1 semester-required for graduation)**

### Preparing for College and Careers (B53940)

**2 semesters, 1 credit, 9<sup>th</sup> grade PTE**

The premise is that if you like what you do for a living, it doesn't seem much like work. In this class, students will be exposed to career options they never knew were available. They will hear from successful professional people what it takes to rise to the top of their career field. Students will explore their interests, abilities, and values to determine potential career paths. In addition to identifying and investigating career paths, students will learn how to manage their jobs once they've begun work. Students will become knowledgeable consumers of news media to understand how economic, financial, political, national, and world events may impact their careers and career goals. Students will also develop learning strategies and acquire life-long success skills (including time management, prioritization, and problem solving). **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### Personal Financial Responsibility (B45400)

**1 semester, 1 credit GRADUATION REQUIREMENT**

**Course taken Junior Year.**

This is a course of "financial survival" for all students regardless of their future endeavors. This course will focus on many areas of financial planning, such as income, money management, credit and credit cards, investing, checking and savings accounts, loans, interest, taxes, and consumer rights and responsibilities. Tools will include calculators, MS Excel, and the Internet. Guest speakers will help keep students abreast of current information in this ever-changing field.

## **Accounting Fundamentals (B45240)**

*Formerly Introduction to Accounting*



**Scan the QR Code to learn more about this course**

**2 semesters, 2 credits**

Students learn skills that can be used to obtain entry-level jobs or to start one's own business, such as tax preparation, record keeping, bank reconciliation, computer data entry, and payroll preparation. The course can also be used as a stepping stone toward securing a career in accounting, investing, or any major in business. Any student planning to major in business in college is highly recommended to complete at least one year of accounting. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## **Accounting II (B45220)**



**Scan the QR Code to learn more about this course**

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: Accounting Fundamentals**

Advanced Accounting expands on the Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting covered in introduction to 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. Students are required to take Introduction to Accounting prior to enrollment in this course. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## **Digital Applications and Responsibility (B45280)**

**1 semester, 1 credit**

**Dual Credit: CINS 101 Ivy Tech**

Digital Applications and Responsibility introduces students to the physical components and operation of computers. Technology is used to build students decision-making and problem-solving skills. Students should be given the opportunity to seek an industry-recognized digital literacy certification. Knowledge of hardware, software, and hands-on training using Microsoft Office Professional Edition will lay the foundation for success in college and future careers. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## **Digital Applications and Responsibility II (B45282)**

**1 semester, 1 credit**

**Recommended: Digital Applications I**

Expansion of MS Office Professional software training provides students with the knowledge and skills necessary for success in college and the business world. Integration of application software, group collaboration, decision-making and problem solving activities helps students gain confidence in using technology. The benefits of the skills learned are lifelong. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## Introduction to Business (B45180)



Scan the QR Code to learn more about this course

**2 semesters, 2 credits – Project Based Learning Course**

**Recommended: Digital Applications I**

Business Foundations is an introductory business course that examines the American business system in relation to the economic society. It is an introductory business course that studies economics, entrepreneurship, business ownership, organization principles and problems, management, marketing, control facilities, law, risk management, banking, personal finance, administration, careers in business and development practices of American business enterprises. It is designed to get the student started in the world of business, whether as a consumer, an employee, or a citizen. The application of business etiquette and ethics are also included. The course covers business management, entrepreneurship, marketing fundamentals, and business ethics and law. The course further develops business vocabulary and provides an overview of business and the role that business plays in economic, social, and political environments. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## Business Law and Ethics (B45600)



Scan the QR Code to learn more about this course.

**1 semester, 1 credits**

**Dual Credit: BSN 102 Ivy Tech**

Know your rights! Business and Personal Law gives students the edge in understanding the fundamentals of the law in our society. In this class, students experience the law hands-on. Lively class discussions on current events, group work, case studies, and internet projects make for a relevant and lively classroom atmosphere. During the course of the semester, students learn the details of the law at home and in the workplace. The highlight of the course is the mock trial at the end of the semester. Students have the opportunity to test their knowledge by acting as attorneys, witnesses, and researchers in reenacting a real trial. Business Law and Ethics provides an overview of the legal system in the business setting. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## Business Management (B45620)

*Formerly Principles of Business Management*

**2 semesters, 2 credits**

**Dual Credit: BSN 102 Ivy Tech**

**Recommended: Intro to Business**

Principles of Business Management focuses on the roles and responsibilities of managers as well as opportunities and challenges of ethically managing a business in the free enterprise system. Students will attain an understanding of management, team building, leadership, problem solving steps and processes that contribute to the achievement of organizational goals. The management of human and financial resources is emphasized. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## Advanced Business Management (B52680)

**2 semesters, 2 credits**

**Dual Credit: BUSN 105 Ivy Tech**

**Recommended: Principles of Management or Introduction to Business**

Are you thinking about owning your own business or entering the field of management? Are you considering a major or minor in business? Advanced Business Management is an advanced business course that prepares students to plan, organize, direct, and control the functions and processes of a firm or organization, while performing business-related activities. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business, management, and finance through hands-on experience in group projects, class discussions, guest speakers, field trips, simulations, and internet projects. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### **Marketing Fundamentals (B59140)**

*Formerly Principles of Marketing*

**2 semesters, 2 credits**

**Dual Credit: MKTG 101 Ivy Tech**

Want to be a better consumer and learn the fundamentals of marketing? In Marketing Fundamentals, you can do both! The areas of product development, branding, merchandising, and consumer satisfaction are integral parts of the curriculum. Student activities include: package design, logo creation, sampling, multimedia advertisement design and creation, and improved consumer awareness. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### **Sports and Entertainment Marketing (B59840)**



**Scan the QR code to learn more about the course**

**2 semesters, 2 credits**

Sports and Entertainment Marketing is a marketing course providing students with the opportunity to apply marketing principles in the fields of sports, recreation, and entertainment. Students will produce and market activities for athletic and entertainment programs at the high school and within the private sector. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### **Strategic Marketing (B59180)**



**Scan the QR code to learn more about the course**

**2 semesters, 2 credits**

**Dual Credit: MKTG 230 Ivy Tech**

**Required to Receive Dual Credit: Principles of Business Management or Marketing**

Strategic Marketing builds upon the foundation of marketing and applies the functions of marketing at an advanced level. Students will study the basic principles of consumer behavior and examine the application of theories from psychology, social psychology, social media and economics. The relationship between consumer behavior and marketing activities is reviewed. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### **Merchandising (Fashion) (B59620)**

**2 semesters, 2 credits**

Merchandising is a marketing course providing instruction in the marketing of apparel and accessories of all kinds. Students will enter a world of beauty, style, and promotion. Topics relate to apparel design, selling, pricing, distribution, fashion promotion, visual merchandising, fashion cycles, fashion theories, and career opportunities in the fashion industry will be covered in the class. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### **Entrepreneurship and New Ventures Capstone (B59660)**

**2 semesters, 2 credits – Project Based Learning Course**

**Dual Credit: ENTR 101 and ENTR 105 Ivy Tech (6 college credits) Recommended: Business Management or Marketing Fundamentals**

Entrepreneurship and New Ventures Capstone introduces entrepreneurship, and develop skills and tools critical for starting and succeeding in a new venture. The entrepreneurial process of opportunity recognition, innovation, value proposition, competitive advantage, venture concept, feasibility analysis and “go to” market strategies will be explored through mini-case studies of successful and unsuccessful entrepreneurial start-ups. Additionally, topics of government and legal restrictions, intellectual property, franchising location, basic business accounting, raising startup funding, sales and revenue forecasting, and business plan development will be presented through extensive use of word processing, spreadsheet and presentation software. **This is a CTE course, for funding and employment follow-up; the student’s social security number will be needed.**

### **Web Design (B45740)**

**1 semester, 1 credit**

Web Design develops key digital communication skills: design, communication, project management, and Web technology. Key skills are developed in a spiral, as each project adds more challenging skills on foundational proficiencies. Projects range from online logos to electronic portfolios to rich media client Web sites. Each project follows the development process from planning to evaluation. The design and production projects include graphics and images (digital photographs, logo design, page banners, etc.), Web sites (basic client Web sites, Web site redesign, etc.), and rich media (video for the Web, digital narratives, and animation techniques). **This is a CTE course, for funding and employment follow-up; the student’s social security number will be needed.** \*\*IT Academy Certification

### **Computer Illustration and Graphics (B45160)**

**1 semester, 1 credit**

**Recommended: Web Design**

Computer Illustration and Graphics introduces students to the computer’s use in visual communication. The focus of the course is on basic computer terminology and use, mastering fundamental skills, and developing efficient working styles. These skills are then developed by creating work with imaging, drawing, interactive, and page layout software. The course includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, produce vector illustrations, graphics and logos, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design products. **This is a CTE course, for funding and employment follow-up; the student’s social security number will be needed.**

### **Computer Science I (B48010)**

**2 semesters, 2 credits**

**Dual Credit: CINS 137 Ivy Tech**

**Quantitative Reasoning Course**

**Recommended: Algebra I**

Computer Programming I (Visual Basic) is a full-year course designed to provide students with a comprehensive hands-on experience in graphically designing and coding computer programs using the Visual Basic programming language and Visual Studio software. Computer Programming I will cover fundamental concepts of programming through explanations and effects of commands, and hands-on utilization of lab equipment to produce correct output. This course introduces the structured techniques necessary for efficient solution of business-related computer programming logic problems and coding solutions into a high-level language, and includes program flowcharting, pseudo coding, and hierarchy charts as a means of solving these problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems, and reviews algorithm development, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks. It also offers students an opportunity to apply skills in a laboratory environment. Visual Basic is the only (computer) language being examined and utilized. Demonstrations of business problems and solutions techniques will be reviewed. This course is designed for students who love computers, math, or visually designing computer programs or games. As a capstone project, students will create, design, and code a game using VB controls, Visual Basic code, and the concepts learned in the course. **This is a CTE course, for funding and employment follow-up; the student’s social security number will be needed.** \*\*IT Academy Certification

**Computer Science II (B52360)**  
**2 semesters, 2 credits**  
**Dual Credit: CINS 121 Ivy Tech**  
**Quantitative Reasoning Course**  
**Recommended: Algebra I**

Computer Programming II (C++) is a full-year course designed to provide students with introductory experience of programming logic and the C++ programming language using Visual Studio software. Topics include data types, control structures, functions, arrays, I/O streams, classes, objects, and much more. Computer Programming II explores and builds skills in C++ and Java. The study of C++ provides an understanding of the fundamentals of procedural program development using structured, modular concepts, and emphasizes logical program design involving user-defined functions and standard structure elements. Discussions will include the role of data types, variables, structures, addressable memory locations, arrays and pointers. Data file access methods are also presented. The development of Java programming skills will provide a basic understanding of the fundamental concepts with an emphasis on logical program design using a modular approach which involves task oriented program functions. Java allows the design of an Internet user interface. The application is built by selecting forms and controls, assigning properties and writing code. As a capstone project, students will create, design, and code a text-based game using C++ code and the concepts learned in the course. This course is offered to students who are deeply involved with computers or who intend to study engineering, computer science, mathematics, medicine, business, or any computer-related field in college. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.** \*\* IT Academy Certification

**Computer Science III: Cybersecurity Capstone-PLTW (B52530)**  
**2 semesters, 2 credits**

**Recommended: Computer Science I and Computer Science II**

Cyber Security, a PLTW course, exposes students to the ever growing and far-reaching field of cybersecurity. Students accomplish this through problem based learning, where students role-play and train as cybersecurity experts do. Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking and especially "outside-the-box" thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. The course contains the following units of study: Personal Security, System Security, Network Security and Applied Cybersecurity. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

**AP Computer Science A (B45700)**  
**2 semesters, 2 credits**  
**Quantitative Reasoning Course**

**Recommended: AP Computer Science Principles or Computer Science I, and Algebra II**

Computer Science A, Advanced Placement (Java Programming) is a full-year course designed to provide students with the content established by the College Board. Topics include: object-oriented program design, program implementation, program analysis, standard data structures, standard algorithms, and computing in context. Computer Science A emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development. Juniors and seniors may be eligible to earn three college credits by taking this course.

\*\*The Business Department offers students the opportunity to join and be certified in the IT (Information Technology) Academy. The IT Academy is an Indiana initiative to encourage students to develop proficiencies in the IT area. The courses listed with IT Academy certification represent requirements for the two areas: IT: Interactive Media and IT: Programming and Software Development. Students granted certifications are recognized at Senior Honors Night. See your counselor and/or the Business Department Chair for more information. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

**AP Computer Science Principles (B45750)**  
**2 credits, 2 semesters**

**Recommended: Algebra I**

AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, AP Computer Science Principles prepares students for college and careers. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## FINE ARTS

### Fine Arts CORE 40 Credit Options

Any course from the following list will satisfy the Fine Arts Course requirement for the Core 40 Diploma.

2-D or 3D Art I(s)  
2-D or 3D Art II  
2-D or 3D Art III/IV  
Ceramics I(s)  
Ceramics II(s)  
Ceramics III/IV  
AP 2-D Art and Design  
AP 3-D Art and Design  
Student Media

Student Media Honors  
Theatre Arts  
Theatre Arts II  
Theatre Production Mgmt.  
Photography  
Housing & Interior Design  
Junior Treble Choir  
Senior Treble Choir  
Varsity Choir

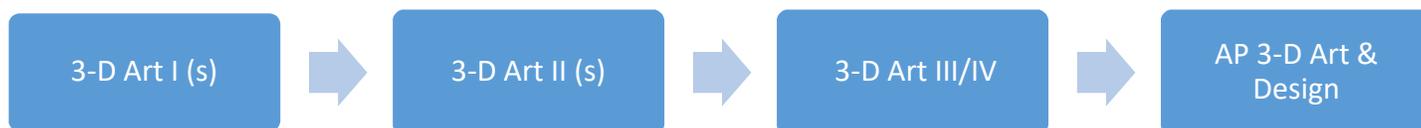
Concert Choir  
Beginning Concert Band  
Symphonic Band  
Concert Band  
Advanced Concert Band  
Wind Ensemble  
Instrumental Ensemble I  
Instrumental Ensemble II  
Jazz I

Jazz II  
Electronic Music  
Music Theory  
AP Music Theory  
Music History/Appreciation  
Hand Bells I  
Hand Bells II  
Introduction to Guitar

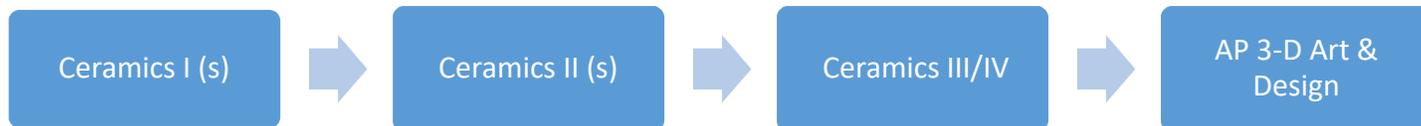
### TWO-DIMENSIONAL AP Course Sequencing



### THREE-DIMENSIONAL AP Course Sequencing



### CERAMICS (3-D) AP Course Sequencing



(s)= Semester Course

#### 2-D Art I (A40000)

1 semester, 1 credit

Art I emphasizes drawing, color theory, and the principles and elements of art. Areas covered are: drawing, painting, printmaking, design, art appreciation, art history, careers, and current trends in art. Students will examine the significance and meaning of their own art, as well as the art done by famous artists. Counts as a Fine Art credit for the AHD.

#### 2-D Art II (A40042)

1 semester, 1 credit

**Recommended:** 2-D Art I

Students in 2-D Art II build on the sequential learning experiences of 2-D Art I. Students will engage in learning experiences that explore art history, art criticism, and studio production. Counts as a Fine Art credit for the AHD.

#### 2-D Art III/IV (A40043)

2 semesters, 2 credits

**Recommended:** 2-D Art I and II

2-D Art III/IV provides sequential learning experiences building on the fundamental skills learned in the previous classes. The production of an art portfolio will be discussed as well as art careers. This course is for the serious art student who wants to polish their skills and add to their portfolio. Problem solving and self-criticism is emphasized. Counts as a Fine Art credit for the AHD.

**2-D Art V/VI (A40044)****2 semesters, 2 credits****Recommended: 2-D Art I, II, III/IV**

2-D Art V/VI provides sequential learning experiences building on the fundamental skills learned in the previous classes. The production of an art portfolio will be continued as well as art careers. The third year of Art is for the serious art student who wants to polish their skills and add to their portfolio. Problem solving and self-criticism is emphasized. Counts as a Fine Art credit for the AHD.

**AP 2-D Art and Design (A40500)****2 semesters, 2 credits – Project Based Learning Course****Recommended: Recommended 2-D Art I, II and III/IV and Art Teacher recommendation.****This course will meet concurrently with Art V/VI.**

AP 2-D Art and Design is a course for students who are serious about developing their portfolio of artwork in a concentrated area through the improvement of technique and design skills. In order to provide additional time for portfolio development, this course may be taken as a two-year extended study with credit awarded in the 2-year course as AP. At the completion of the first year, students have an option to continue into the second year. Focus will be on the quality, concentration, and breadth of work produced. Creative thought is essential, combined with the investigation of concepts, issues, and personal themes and subject -matter through individual research and involved decision making. Students are challenged to become independent thinkers who will contribute inventively and critically to their culture through the making of art. Students will develop ideas according to national standards of performance through an examination of completed portfolio work. Counts as a Fine Art credit for the AHD.

**3-D Art I (A40020)****1 semester, 1 credit**

Students taking 3-D Art I engage in learning experiences that encompass the study of historical and current trends in art. This information can then be incorporated into their own art. Course projects include working in the following mediums: sand, clay, wood, fiber, plaster, plastic, glass, glass-fusing, glass slumping, and jewelry making. Counts as a Fine Art credit for the AHD.

**3-D Art II (A40060)****1 semester, 1 credit****Recommended: 3-D Art I**

Students taking 3-D Art II build on the sequential learning from 3-D Art I while further enhancing their artistic creativity in more technical design ideas and projects. Further study in art history, art theory, and art criticism are incorporated into the curriculum. Counts as a Fine Arts credit for the AHD.

**3-D Art III/IV (A40061)****2 semesters, 2 credits****Recommended: 3-D Art I, 3-D Art II**

Students taking 3-D Art III/IV further enhance their artistic expression and creativity through a more skilled and self-directed approach. Further study in art theory, criticism and current art trends are incorporated into the curriculum. Students may take this course multiple times and receive credit. Counts as a Fine Arts credit for the AHD.

**Ceramics I (A40401)****1 semester, 1 credit**

This course is an introduction to clay and its properties. Students learn the fundamentals of pinch, coil, and soft slab hand building techniques. Emphasis will be placed on proper construction, surface design, and glaze options. Student will evaluate and self-critique their own work. Counts as a Fine Arts credit for the AHD.

**Ceramics II (A40402)****1 semester, 1 credit****Recommended: Ceramics I**

This course further explores hand building with an introduction to sculpture, stiff slab and advanced decorating. Students will also learn the fundamentals of wheel throwing with stress on proper technique and skill for success. Emphasis is placed on design aesthetics, more advanced glazed and staining techniques, visual problem solving, art criticism and self-critique. Counts as a Fine Art credit for the AHD.

**Ceramics III/IV (A40403)**

**Project Based Learning Course**

**2 semesters, 2 credits**

**Recommended: Ceramics I and Ceramics II**

This course is designed to sharpen skill in either (or both) wheel throwing and hand building techniques. An advanced study in surface and glaze analysis, form, function and design is explored. Emphasis is placed on creativity, skill, and craftsmanship. Students may take this course multiple times for credit. Counts as a Fine Art credit for the AHD.

**AP 3-D Art and Design (A40520)**

**2 semesters, 2 credits**

**Recommended: Ceramics I, Ceramics II, Ceramics III/IV or 3-D Art I, 3-D Art II, 3-D Art III/IV**

This course is designed for the advanced level student who is serious about developing their skills with clay. Emphasis will be on the quality, technical skills, investigation and exploration of concepts. Students must be willing to accept the committed challenge of a focused and rigorous art program. This course provides the advanced art student a rewarding opportunity to develop artistic skills while building and preparing a portfolio. This work may then be submitted for evaluation to receive college credit and/or advanced placement credit for a college art course elective. Counts as a Fine Art credit for the AHD.

## COMMUNICATIVE ARTS

### Theatre Arts (J42420)

#### 2 semesters, 2 credits – Project Based Learning Course

Theatre Arts I is a year-long course for freshmen, sophomores, juniors and seniors. Theater Arts I introduces students to the basics of theater. Students do various activities and exercises that introduce and familiarize them with all aspects of theater. Using the knowledge gained through the study of theatre, students focus on solving problems faced by actors, directors, and technicians. They also refine their abilities to collaborate on performances, and they learn to constructively evaluate their own and others' efforts. Counts as a Fine Art credit for the AHD.

### Advanced Theatre Arts (J42400)

#### 2 semesters, 2 credits – Work Based and Project Based Learning Course

##### **Recommended: Theater Arts and Completed Application**

Advanced Theater Arts is a year-long course for sophomores, juniors and seniors. Students must have taken Theater Arts I to qualify. Advanced theater teaches students more advanced improvisation, analysis of plays, production work, independent thinking, and self-evaluation of work. This is accomplished by having students create and work in their own theater production companies. They experience all aspects of theater by creating the group, putting together productions, raising funds, and serving the community. Counts as a Fine Art credit for the AHD.

### Theatre Production Management (J42480)

#### 2 semesters, 2 credits – Work Based and Project Based Learning Course

Students enrolled in Theatre Production Management take on the responsibilities associated with the technical rehearsal and presentation of a theater production. Students learn sound, lighting, and rigging equipment; safety and security of the facility; front of house duties; and back of house duties. Students will perform roles in a production such as lighting, spotlight, soundboard, costumes, props, and curtain for Advanced Theatre class productions. In addition, students will be staff for the auditorium director on productions and events. Therefore, some out of class auditorium events will be required to work in exchange for pay. Counts as a Fine Art credit for the AHD.

### Journalism: Publication Design (J1080P)

#### 1 semester, 1 credit

This course will look at fundamental concepts of publication design. Students will learn to communicate visual messages clearly in various media. Basic grid design, typography, color theory and effective use of photography will be discussed. Students will use the Adobe Creative Suite to create magazine spreads, advertisements, news sites and other visual presentations.

### Journalism: Writing (J1080W)

#### 1 semester, 1 credit

This course will concentrate on the history of journalism, the basics of news elements, newswriting, journalism law and ethics. Students will learn the importance of the media in our society and the First Amendment, as well as knowing their limits to those rights. Students will also master the basic fundamentals of news writing, feature story and opinion writing.

### Photography (J40620)

#### 1 semester, 1 credit

##### **Recommended: Must own a digital camera and memory card**

Digital Photography is an introductory course of photojournalism, specifically the type of photography that meets the requirements for publication. People, still life, action, portraits, photo stories as well as digital technology will be discussed and put into practice. Students will be responsible for their own transportation when shooting assignments and also for the purchase of supplies for personal use. Counts as a Fine Art credit for the AHD.

### Student Media (J10860)

#### 2 semesters, 4 credits – Project Based Learning Course

##### **Recommended: Intro to Journalism or Digital Photo.**

The purpose of the Publishing staff is to produce journalistically sound student media. All students will learn and apply desktop publishing skills, writing, editing, design, leadership, law and ethics, AP Style, photography, public relations, teamwork and communication skills while contributing to the student newsmagazine, yearbook, online news site and social media feeds. Each student is responsible for his or her own transportation to cover events. After-school work time is required. This course is double-blocked, and meets for two consecutive periods. Counts as a Fine Art credit for the AHD.

**Student Media Honors (J1086H)**

**Advanced Writing and Editing (T30220)**

**2 semesters, 4 credits – Project Based Learning Course**

**Recommended: 1 year of a Publishing staff. Apply to adviser.**

This course is open to Publication editors only and provides for further study and practice in analyzing information, interviewing, and note taking for the purpose of writing, editing, and publishing student media. Student editors must plan, publish, market and distribute their publications tied to instruction in law and ethics, AP Style and leadership strategies. Counts as a Fine Art credit for the AHD.

**Public Relations (X05300)**

**2 semesters, 2 credits – Project Based Learning Course**

**Recommended: 1 or more semesters of Intro to Journalism or Digital Photo**

Students in the Public Relations Internship will work at other district schools to report news to the community and parents. Students will need their own transportation to the schools and should be prepared to work on their schedule. Interns may also choose to work on the school's livestream team. Livestream members create live broadcasts of home varsity sports, events throughout the year and graduation. They will also create graphics and run the video board at school events.

## MUSIC (FINE ARTS)



### **Symphonic Band (Marching U41600) (Non-Marching U4160N)** **2 semesters, 2 credits Grade: 9 Project Based Learning Course**

**Recommended: Complete formal instruction at the middle school level.**

This concert band class is open to all students who play a band instrument at an intermediate level. This is a co-curricular course that involves participation during school and outside school. Emphasis is placed on tone, technique development and sight reading. Participation in the ISSMA Solo/Ensemble contest is encouraged. The band performs several times during the year. Private lessons are highly encouraged. Counts as a Fine Art credit for the AHD.

### **Concert Band (Marching U41680) (Non-Marching U4168N)** **Project Based Learning Course**

**2 semesters, 2 credits Grades: 10-12**

**Recommended: Selection by audition or director permission**

This concert band class is available by audition to students who play a band instrument at an upper intermediate to advanced level and are enrolled in marching band. This is a co-curricular course that involves participation during school and outside school. Emphasis is placed on tone, technique development and sight reading. Advanced performance techniques are emphasized. Participation in the ISSMA Solo/Ensemble contest is encouraged. Serious band literature is selected from a variety of periods in music history. Private lessons are highly encouraged. Counts as a Fine Art credit for the AHD.

### **Wind Ensemble Band (Marching U41700) (Non-Marching U4170N)** **Project Based Learning Course**

**2 semesters, 2 credits Grades: 10-12**

**Recommended: Selection by audition or director permission**

This advanced band is considered the top concert band at Lake Central High School. The band represents Lake Central High School in public performances and competitions. Advanced performance techniques are emphasized. This is a co-curricular course that involves participation during school and outside school. Serious band literature is selected from a variety of periods of music history. Private lessons are highly encouraged. Counts as a Fine Art credit for the AHD.

Students who are enrolled in the marching band will be placed in Advanced Concert Band or Intermediate Concert Band as assigned by the Director.

### **Jazz Ensemble (U41640)**

**Project Based Learning Course**

**2 semesters, 2 credits Grades: 9-12**

This is a co-curricular course that involves participation during school and outside school. Emphasis is placed on tone and technique development and sight-reading skills. Jazz theory and improvisation are included in the course of study. The group performs several times each year. Open to any current band student or former band student. Exceptions would be made for guitarists, bassists or piano players with director approval. Counts as a Fine Art credit for the AHD.

### **Percussion Ensemble (U42001)**

**2 semesters, 2 credits Grades: 9-12**

This course is co-curricular and involves participation during school, after school, and on weekends. Percussion Ensemble performs music that is graded medium to advanced. All rehearsals, commencement and concerts are required. Students in this class will perform with multiple groups including Beginning Band, Concert Band, Wind Ensemble, and the Lake Central Marching Band. Students are encouraged but not required to take private instrumental lessons, participate in ISSMA solo and ensemble contests, and participate in auditions for All-State Ensembles.

**Electronic Music/Music Production (U42020)****1 semester, 1 credit Grades: 9-12**

Students taking this course are provided with a wide variety of activities and experiences to develop skills in the use of electronic media and to incorporate current technology. Instruction is designed so that students are enabled to connect, examine, imagine, define, try, extend, refine, and integrate music study into other subject areas. Students will create music on a Synthesizer/Instrument (Guitar or Bass) and it is automatically entered into the computer where students can manipulate sound and/or create their own compositions. This class may be taken more than once. Counts as a Fine Art credit for the AHD.

**Music Theory I (U42080)****1 semester, 1 credit Grades: 9 -12**

This semester class is open to any student in the high school wanting to expand their knowledge of music construction and composition. The materials covered will consist of the following: knowledge of the names of the notes, identification of notes to a piano keyboard, all major and minor key signatures and scales, time signatures, note values, intervals, and understanding of rhythmic figures, aural association to pitch, and the ability to identify the construction of music. Counts as a Fine Art credit for the AHD.

**AP Music Theory (U42100)****2 semesters, 2 credits Grades: 10-12****Recommended: Music Theory I**

Advanced Placement Music Theory is designed for the able and ambitious high school student who is committed to the close study of music structure and who has the desire and determination to gain advanced placement in music while still in high school. To qualify to enroll in AP Music Theory, the student must successfully complete Music Theory I, or possess a solid background in the skill areas of rhythm and notation reading (bass clef and treble clef) as well as scales and major key signatures. The focus of study is centered on techniques for aural and written analysis of music literature. All students enrolled in the course should take the Advanced Placement Music Theory exam in the spring. Counts as a Fine Art credit for the AHD.

**Music History/Appreciation (U42060)****1 semester, 1 credit**

Students taking this course will receive instruction designed to explore music and major musical style periods through understanding music in relation to both Western and non-Western history and culture. Activities include, but are not limited to, 1) listening to, analyzing, and describing music, 2) evaluating music and music performances, and 3) understanding relationships between music and the other arts as well as disciplines outside of the arts. Counts as a Fine Art credit for the AHD.

**Hand Bells I: Instrumental Ensemble (U41624)****2 semesters, 2 credits Project Based Learning Course****Recommended: Some note reading ability**

This beginning to intermediate level choir consists of 15-30 players chosen by audition. Students will study music reading, bell literature, and techniques. Members must attend all choir concerts. Counts as a Fine Art credit for the AHD.

**Hand Bells II: Instrumental Ensemble (U41625)****2 semesters, 2 credits Project Based Learning Course****Recommended: Selection by Director**

Intermediate skill level is required to participate in this class. Members must attend all concerts. Music reading is required. Counts as a Fine Art credit for the AHD.

**Introduction to Guitar (U42000)****1 semester, 1 credit Grades: 9-12**

This course will introduce students to playing the guitar. The class will stress technique, music theory in regard to note and tablature reading, critical listening skills, improvisation, and performance of beginning guitar literature. Instruments are provided and no prior musical experience is necessary. Counts as a Fine Art credit for the AHD.

## CHOIR (FINE ARTS)



### **Junior Treble: Beginning Chorus (U41820)**

#### **2 semesters, 2 credits Project Based Learning Course**

This is the beginning soprano and alto choral ensemble. Focus will be on learning the fundamentals of singing and reading music. Sopranos and altos entering choir for the first time should be placed here (unless the director has emailed their guidance counselor saying differently). Counts as a Fine Art credit for the AHD.

### **Varsity Choir: Intermediate Chorus (U41860)**

#### **2 semesters, 2 credits Project Based Learning Course**

This is the beginning mixed choral ensemble. Focus will be on learning the fundamentals of singing and reading music. Basses and tenors entering choir for the first time should be placed here (unless the director has emailed their guidance counselor saying differently). Counts as a Fine Art credit for the AHD.

### **Senior Treble: Advanced Chorus (U41880)**

#### **2 semesters, 2 credits Project Based Learning Course**

##### **Recommended: Selection by Director**

This is the most advanced treble ensemble. Students entering are expected to be fluent in reading music and sight singing. Counts as a Fine Art credit for the AHD.

### **Concert Choir: Choral Chamber Ensemble (U41800)**

#### **2 semesters, 2 credits Project Based Learning Course**

##### **Recommended: Selection by Director**

This is the most advanced mixed choral ensemble encompassing all voice parts. Students entering are expected to be fluent in reading music and sight singing. Counts as a Fine Art credit for the AHD.

## **FAMILY AND CONSUMER SCIENCES (FACS)**

**Many courses in Family and Consumer Sciences are Career-Technical Education (CTE) courses and will require a student's social security number be provided.**

### **Nutrition & Wellness (C53421)**

#### **1 semester, 1 credit Project Based Learning Course**

This course is an introductory course valuable for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers related to nutrition, food, and wellness. This is a nutrition class that introduces students to only the basics of food preparation so they can become self-sufficient in accessing healthy and nutritious foods. Major course topics include nutrition principles and applications; influences on nutrition and wellness; food preparation, safety, and sanitation; and science, technology, and careers in nutrition and wellness. A project-based approach that utilizes higher order thinking, communication, leadership, management processes, and fundamentals to college and career success is recommended in order to integrate these topics into the study of nutrition, food, and wellness. Food preparation experiences are a required component. Student's social security number is required to receive CTE funding for this class.

### **Advanced Nutrition & Wellness (C53400)**

#### **1 semester, 1 credit Project Based Learning Course**

##### **Recommended: Nutrition & Wellness**

This 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. This course builds on the foundation established in Nutrition and Wellness, which is a recommended 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. Food preparation experiences are a required component, along with recipe education and journal entries related to nutrition and food preparation. Student's social security number is required to receive CTE funding for this class.

### **Advanced Nutrition & Wellness- Baking (C53401)**

#### **1 semester, 1 credit Project Based Learning Course**

##### **Recommended: Nutrition & Wellness**

This is a course which provides an extensive study of nutrition. 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. This course builds on the foundation established in Nutrition and Wellness, which is a recommended prerequisite. This is a project-based course utilizing higher-order thinking, communication, leadership and management processes. Additional topics include extensive study of major nutrients, nutritional standards across the lifespan, and influences on nutrition/food choices, technological and scientific influences and career exploration in this field. Food preparation experiences are a required component, along with recipe education and journal entries related to nutrition and food preparation. Student's social security number is required to receive CTE funding for this class.

### **Child Development and Parenting (C53620)**

#### **1 semester, 1 credit**

This course is an introductory course for all students as a life foundation and academic enrichment; it is especially relevant for students interested in careers that draw on knowledge of children, child development, and nurturing of children. This course addresses issues of child development from conception/prenatal through age 3. It includes the study of prenatal development and birth; growth and development of children; child 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 recommended in order to integrate these topics into the study of child development. Student's social security number is required to receive CTE funding for this class.

### **Advanced Child Development (C53600)**

#### **1 semester, 1 credit Project Based Learning Course**

##### **Recommended: Child Development and Parenting**

In this course, students will be able to advance their understanding 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. Students will experience a project-based approach that utilizes higher order thinking, communication, leadership, management, and fundamentals to college and career success. Student's social security number is required to receive CTE funding for this class.

**Introduction to Culinary Arts and Hospitality Management (C54380)****2 semesters, 2 credits Grades 10-12 Project Based Learning Course****Recommended: Nutrition and Wellness, Advanced Nutrition and Wellness**

Introduction to Culinary Arts and Hospitality is recommended for all students regardless of their career cluster or pathway, in order to build basic culinary arts knowledge and skills. It is especially appropriate for students with an interest in careers related to Hospitality, Tourism, and Culinary Arts. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended. Topics include basic culinary skills in the foodservice industry, safety and sanitation, nutrition, customer relations and career investigation. Students are able to explore this industry and examine their own career goals in light of their findings. Laboratory experiences that emphasize industry practices and develop basic skills are required components of this course. Student's social security number is required to receive CTE funding for this class.

**Housing and Interior Design (C53500)****1 semester, 1 credit \*Fine Art Credit-****Project Based Learning Course**

This course will emphasize the application of art principles in planning and designing aesthetically pleasing living environments for individuals and families. Students will learn to identify architecture styles, decorating periods, and color schemes. Other topics that may be addressed are the elements and principles of design as they apply to interior decorating and furnishing an apartment. Student's social security number is required to receive vocational funding for this class. Counts as a Fine Art credit for the AHD. Student's social security number is required to receive CTE funding for this class.

**Human Development & Family Wellness (C53660)****1 semester, 1 credit Project Based Learning Course**

This course provides the opportunity to gain the knowledge and skills of standard first aid and everyday health practices, including simple home nursing techniques. Rescue breathing, choking, and CPR will be studied. Chronic diseases such as cancer, diabetes, and heart diseases are also studied. Student's social security number is required to receive vocational funding for this class. Student's social security number is required to receive CTE funding for this class.

**Human & Social Services I (C53360)****2 semesters, 2 credits Project Based Learning Course**

In this course, students will be able to explore careers in human and community services and other helping professions through project-based learning that will help students integrate higher order thinking, communication, leadership, and management level skills. Students will be introduced to human and social services professions through presentations from a variety of guest speakers, job shadowing opportunities, field trips, and introductory field-type experiences. Case studies, role play, and application of professional code of ethics will be utilized reflecting the challenges of working in diverse communities. Student's social security number is required to receive CTE funding for this class.

**Human & Social Services II (C53360)****2 semesters, 2 credits Project Based Learning Course****Recommended: Human & Social Services I**

This course is a core component of the Family and Community Services pathway. The course prepares students for occupations and higher education programs related to assisting individuals and families in meeting their potentials. Through work-based experiences, students apply the knowledge and skills developed in the Human Services Foundations course. Concentration areas include family and social services, youth development, and adult and elder care. Ethical, legal, and safety issues, as well as helping processes and collaborative ways of working with others, will be addressed. Student's social security number is required to receive CTE funding for this class.

**Interpersonal Relationships (C53640)****1 semester, 1 credit Project Based Learning Course**

Students will explore the basic concepts of self-understanding and responsibility for behavior with the focus on the importance of a positive self-image in developing and maintaining relationships. Students will also study the importance of setting goals, working within value systems, achieving and changing personal needs, and communication skills that assist all to achieve mature interpersonal relations. Student's social security number is required to receive CTE funding for this class.

## PHYSICAL EDUCATION

### Secondary Physical Education I/II (Pool/Gym) (P35440/P35420)

2 semesters, 2 credits

#### GRADUATION REQUIREMENT

Emphasis is on health-related fitness and on developing the skills and habits necessary for a lifetime of activity. This program includes skill development and the application of rules and strategies of complex difficulty in at least three of the following different movement forms: health-related fitness activities (cardio respiratory endurance, muscular strength and endurance, flexibility, and body composition), aerobic exercise, team sports, individual and dual sports, gymnastics, outdoor pursuits, self-defense, aquatics, dance, and recreational games. Ongoing assessment includes both written and performance-based skill evaluations.

### Core Conditioning (P3560C)

1 semesters, 1 credits

#### Recommended: Secondary Physical Education I/II

This course emphasizes strengthening the core and toning lean muscle with the variety of interval/circuit training along with Yoga, Pilates, and cardio/dance like Zumba. Course may be repeated.

### Physical Conditioning (P3560P)

2 semesters, 2 credits

#### Recommended: Secondary Physical Education I/II

This course will incorporate individual training programs for Lake Central students. The instructors will work closely with the students allowing each the opportunity to reach their full potential in the class and with their personal fitness goals.

### Health Education (P35060)

1 semester, 1 credit

#### GRADUATION REQUIREMENT

This course provides the basis for continued methods of developing knowledge, concepts, skills, behavior, and attitudes related to student health and well-being. The class includes units in: growth and development, mental and emotional health, community and environmental health, nutrition, family life education, consumer health, personal health, alcohol, tobacco, and other drug education, intentional and unintentional injury and health promotion and disease prevention. Health Education will fulfill the Indiana Health credit required for graduation.

### Intro to Sports Medicine (P35600)

1 semester, 1 credits **Work Based Learning Course**

In this class, the student will explore the human anatomy, physiology, and kinesiology as they relate to sport and sports-related injuries. The students will, in addition, learn the proper techniques for evaluating and rehabilitating injuries as they occur in athletes. Finally, the student will receive information about the duties of an athletic trainer and career and educational choices that will move a student towards a career in sports medicine. Students will be evaluated through written testing as well as practical applications evaluations. There will be a final written exam that will be comprehensive, covering all information covered during the semester.

In addition, a research paper will be completed approximately two weeks prior to the end of the semester. This research paper will be counted as a grade for the second nine weeks of the semester.

### Lifeguarding (P43100)

2 semesters, 2 credits **Service Based Learning Course**

#### Recommended: Life Saving and Water Safety, Teacher approval required.

Students will serve as a lifeguard and assist in instruction of the PE Pool classes. Teacher approval is required for admission into this course.

### Life Saving and Water Safety (P42300)

1 semester, 1 credit **Work Based Learning Course**

#### Recommended: Minimum 15 years of age, able to swim 300 continuous yards Freestyle and/or Breaststroke and recover a 10-pound brick from 8 feet of water.

Emphasis is on the American Red Cross Lifeguard certification. This includes CPR/AED for the Professional Rescuer and First Aid.

This course is designed to provide certification in American Red Cross lifeguarding as well as certification in CPR, AED, and First Aid. This course will help improve swimming skills and train students for jobs at local beaches, pools, and camps

**Advanced Life Saving (Life Saving II) (P42700)****1 semester, 1 credit – Work Based Learning Course****Recommended: Life Saving and Water Safety, certification in all four Red Cross sections**

This class will incorporate certification for Water Front Lifeguarding and re-certification for Lifeguarding/First Aid/CPR/AED. Additional skills in First Aid, snorkeling and underwater rescue will be covered.

**Lifetime Fitness (P3560L)****1 semester, 1 credit - per year****Recommended: Secondary Physical Education I/II**

This class will incorporate a variety of activities such as: ultimate Frisbee, flag football, basketball, volleyball, team handball, and more. Skills, rules, and etiquette of the sport are included. Students may take only one semester of this class.

**Sports Conditioning (P3560A)****2 semesters, 2 credits****Recommended: Secondary Physical Education I/II**

The Sports Conditioning class is for student-athletes who are in good standing at Lake Central. If a student-athlete falls out of good standing they may be removed from the course at the end of the nearest semester. The course is designed to provide an opportunity for athletes to participate in a structured strength and athletic enhancement program. The class is geared toward the student who has shown an above average interest and ability in physical education through participation on a Lake Central High School athletic team. The course will incorporate individual and sport specific strength training programs for Lake Central student athletes. The instructor will work closely with the coaching and athletic training staff allowing the student the opportunity to reach their full potential in the class and in their sport. Students will be given workouts that may include a battery of core lifts for basic strength training. Students will have an opportunity to make use of free weights, medicine balls, agility and plyometric stations. Upon completion of this course students will understand and be able to facilitate a workout program that will enhance performance in their sport or daily life, as well as, promote proactive habits for lifelong fitness.

**Swimming for Fitness (P3560S)****1 semester, 1 credit**

Emphasis is on health-related physical fitness and on maintaining the skills/habits necessary for a lifetime of activity through swimming. This program will include emphasis on cardio-respiratory endurance, muscle endurance, body composition, flexibility, and muscle strength. Students will participate in a variety of individual and team activities

## CAREER AND TECHNICAL EDUCATION

### Graphic Layout and Design (V55500)

(Vocational Graphics I) (V62210)

2 semesters, 2 credits

This course trains qualified students for careers in the printing industry. Emphasis is placed on giving the students a thorough working knowledge and skills in many aspects of the printing industry rather than concentrating on one special area. Areas covered include: history, layout, composition, photograph stripping, plate making, presswork, and bindery. All major processes will be studied with emphasis on offset lithography. Additional topics studied include estimation, paper, links, line-staff relationships, costing, and half-tone photography. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### Graphic Imaging Technology (V55720)

2 semesters, 6 credits Project Based Learning Course

Dual Credit

**Recommended: Intro to Communication Graphics and Teacher Recommendation**

Students concentrate on one of the following: offset presswork, composition, layout/design and keyline art (imposition), stripping, plate making, photography, or bindery. Potential job opportunities for students completing this course are: newspapers, advertising agencies, quick-print shops, specialty houses, offset printing firms, layout artists, photographer, press operator, bindery worker, graphic arts educator, estimator, proofreader, typesetter, and computer graphics. Student's social security number is required to receive CTE funding for this class. **3 credits This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### Introduction to Manufacturing (V47840)

2 semesters, 2 credits

Introduction to Manufacturing is designed to give students a fundamental background of the different types of machines in the machine shop. This course provides the opportunity to learn the basic operations of the lathe as well as the milling machine, drill press, surface grinder, saws, and bench work. Emphasis is placed on precision measurement using micrometers, scales, and vernier calipers. Students will machine required projects on the lathes and milling machines for the first part of the year. They will then have the chance to machine projects of their own choice. The Introduction to Manufacturing I program will give each student basic machining and manufacturing knowledge, blueprint reading, and shop safety knowledge which they will be able to use after completing the first year. Student's social security number is required to receive CTE funding for this class. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### Precision Machining (V57820)

2 semesters, 6 credits Project Based Learning Course

Quantitative Reasoning Course

**Recommended: Intro to Manufacturing I and Teacher Recommendation**

Precision Machining meet three periods during a Blue/White Day cycle to prepare the students to enter the trade as a machinist apprentice. Students will work on all machines in the shop as well as learning basic welding and burning. Students will continue to improve on their lathe and milling machine skills with required projects as well as personal projects with the emphasis on machining precision sizes. Included in Machine II is the introduction to CNC (computer numerical control) and CAM (computer assisted machining). The students will learn how to write a CNC program using G and M codes as well as using Edge cam to write a program. They will then enter the program into the Haas CNC machining center and make the part. Geometry, trigonometry, blueprint reading, bench work, assembly, fabrication, and shop safety are also included in this course. Students are required to join a Career and Technical Student Organization (CTSO). There is a small membership fee associated with this organization. Student's social security number is required to receive CTE funding for this class. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

### Introduction to Transportation (V47980)

2 semesters, 2 credits

Introduction to Transportation is a preparatory course for Automotive Technology I/II. The student will cover each automotive system and the theory of each system. After the student understands how each system works, the student will perform different types of testing and repair work on the various automotive systems. The Introduction to Transportation will give each student basic auto skills which they will be able to use after completing the first year. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

**Automotive Service Technology I/II (V55100)**  
**2 semesters, 6 credits Project Based Learning Course**  
**Dual Credit**

**Recommended: Transportation Processes and Teacher Recommendation Automotive Service Technology I- This course meets from 2:15pm until 4:45pm and no bus transportation is provided. Student must have completed Automotive Services Technology I before taking Automotive Service Technology II which meets during the school day.**

Automotive Technology I/II meet three periods during a Blue/White Day cycle and begin the National Institute for Automotive Service Excellence (also known as ASE) training. This training prepares the student for taking the certification tests for each Certified Technician area and for placement in the automotive career field as an entry-level technician. Students will be able to complete four of eight Certified Technician training areas during this class. During the second year of Automotive Service Technology, students will start the training program from the point he/she left off in Automotive Service Technology I. Students will cover remaining Certified Technician areas. Upon completion of this program, students will be able to enter the automotive diagnostic and repair field as an entry-level technician. Student's social security number is required to receive CTE funding for this class.

Below is a list of Certified Technician areas covered in Automotive Service Technology II and III along with subject area for each. For a student to complete all eight areas, he/she will have to complete two years of Automotive Service Technology course work.

1. Engine Repair - Valve train, cylinder head, and block assemblies; lubricating, cooling, ignition, fuel and carburetion, exhaust, battery, and fuel systems.
2. Automatic Transmission/Transaxle - Controls and linkages, hydraulic and mechanical systems.
3. Manual Drive Train and Axles - Manual transmissions, clutches, front and rear drive systems.
4. Front End - Manual and power steering, suspension systems, alignment, and wheels and tires.
5. Brakes - Drum, disc, combination, and parking brake systems, power assist and hydraulic systems.
6. Electrical Systems - Batteries, starting, charging, lighting, and signaling systems, electrical instruments and accessories.
7. Heating and Air Conditioning - Refrigeration, heating and ventilating, A/C controls.
8. Engine Performance - Oscilloscopes and exhaust analyzers, emission control and charging systems, cooling, ignition, fuel, carburetion, exhaust, and battery and starting systems.

**This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

**Introduction to Engineering Design: Project Lead the Way (V48020)**



**Scan the above QR code to learn more about this course**  
**2 semesters, 2 credits**

Introduction to Engineering Design (IED) is a high school level course that is appropriate for 9th or 10th grade students who are interested in design and engineering or another technical career. The major focus of the IED course is to expose students to a design process, professional communication and collaboration methods, design ethics, and technical documentation. IED gives students the opportunity to develop skills in research and analysis. Teamwork, technical writing, engineering graphics, and problem solving through activity-, project-, and problem-based (APPB) learning are emphasized. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills and creative abilities while applying math, science, and technology knowledge learned in other courses to solve engineering design problems and communicate their solutions. IED also allows students to develop strategies to enable and direct their own learning, an ultimate goal of education. No previous knowledge is assumed, but students should be concurrently enrolled in college preparatory mathematics and science courses in order to facilitate the use and understanding of appropriate math and science concepts necessary for the successful completion of IED coursework. In addition, students will use industry standard 3D solid modeling software to facilitate the design and documentation of their solutions to design problems and challenges. As the course progresses and the complexity of the design problems increase students will learn more advanced computer modeling skills as they become more independent in their learning, more professional in their collaboration and communication, and more experienced in problem solving. **This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

**Principles of Engineering: Project Lead the Way (V56440)**

**2 semesters, 2 credits**

**Quantitative Reasoning Course**

**Recommended: Introduction to Engineering Design**

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

**Civil Engineering Architecture: Project Lead the Way (V56500)**

**2 semesters, 2 credits**

**Dual Credit**

**Quantitative Reasoning Course**

**Recommended: Engineering Technology**

Architectural Drafting and Design II presents a history and survey of architecture and focuses on the creative design of buildings in a studio environment. This course covers problems of site analysis, facilities programming, space planning, conceptual design, proper use of materials, and selection of structure and construction techniques. Students develop presentation drawings, and give oral presentations and critiques. 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, including fundamentals of three-dimensional modeling for design. It includes an overview of modeling, graphical manipulation, part structuring, coordinate system, and developing strategies of modeling. Advanced CAD will enable the student to make the transition from 2D drafting to 3D modeling. Various Architectural software packages and applications may be used.

**This is a CTE course, for funding and employment follow-up; the student's social security number will be needed.**

## MISCELLANEOUS

### Education Professions I (X54080)

**2 semesters, 6 credits Work Based Learning Course**

**State Requirement: Child Development and Advanced Child Development**

**Recommended: 2.5 GPA, must be a junior or senior, and must fill out application.**

Students will be able to gain foundational skills and knowledge for employment in education and related careers. They will be prepared for study related to education in higher education. They will study the teaching profession, the learner and the learning process, planning instruction, learning environment, and instructional and assessment strategies. They will gain experience in the field in experiences in the classroom setting and through creating career portfolios. **This is a CTE course, for funding and employment follow-up, the student's social security number will be needed.**

### Work Based Learning

**2 semesters, 2-6 credits Work Based Learning Course**

**Recommended: Juniors and Seniors only**

Work Based Learning is a course designed to allow a work-based experience for students to build skills and knowledge in their chosen career path or furthers their study within the area of interest. Students can choose to be involved in an internship off site or school based/on-site. The following are needed to confirm enrollment in the course:

- Confirmation of good school attendance
- Grades are in good standing
- Teacher recommendation(s)
- Student's course credits are on target for proper diploma and graduation
- Parent written permission allowing student to go off campus for purpose of this course
- Student **must** have job secured for WBL prior to the first day of school, and background check completed by the first week of school
- Confirmation of enrollment in an off-site (i.e. Schilling internship) or on-site (i.e. Student Tech Help Desk) place of work also known as a site agreement
- Work site supervisors/mentors have a background check for current school year
- Documentation of work to be paid or non-paid
- Insured transportation
- A completed signed application which includes a training plan aligned with content Indiana State Standards
- Willingness to participate in the Work Ethic Certificate program and obtaining parent's signature to do so
- Understanding that this course requires participation in classroom instruction
- Principal approval

Examples of school based/on-site Work Based Learning opportunities include: Auto Technology, Computer Technology (Work Based Tech (WB) or Live Streaming Tech (LS), Machining, Theater Production. Each student participating in WBL is encouraged to join a student career organization such as Skills USA or Family Career and Community Leaders of America (FCCLA). There may be a small fee for joining these student "professional organizations". At the conclusion of the internship, each student shall submit a portfolio that documents the student's work and that included reflections upon what has been learned. This portfolio is a living document that can be added to as they move on into their lives after high school.

Student's social security number is required to receive CTE funding for this class.

### College Classes: Attend classes at a local college campus

**Recommended: Seniors only**

Students will be able to attend college courses at a local college (Purdue University Northwest, Indiana University or Ivy Tech Community College) in the afternoon. Students must enroll in at least 2 classes each semester.

### Independent Study Research (90080)

**2 semesters, 2 credits**

Independent Study Research is a course that provides students with unique opportunities for independent, in-depth study of one or more specific problems. Students develop a familiarity with the procedures used in a given educational, research, or industrial setting or a variety of such settings. Students enrolled in this course will complete an end-of-course project, such as a scientific research paper, or other approved presentations of their findings. Students must apply through the guidance office in order to be considered for this unique study opportunity. Students must also have a mentor teacher to sponsor their research.

**Peer Mentoring (0502PM)****1 semester, 1 credit Service Based Learning Course**

Students serve as peer mentors by assisting in a special needs classroom during a class period. Students assist in instruction of students with various types of disabilities, explore various career options working with people with disabilities, and promote inclusion of individuals with disabilities in the school community.

**Qualifications**

Peer Mentors are expected to:

- show classroom students and staff respect at all times;
- attend class and have good , consistent attendance in all classes;
- maintain passing grades in all classes;
- be honest;
- show initiative;
- work independently in all areas;
- demonstrate appropriate social and behavior skills in all areas; and
- participate in activities and ask when unsure what to do.

**Peer Tutoring (0520PT)****1 semester, 1 credit Service Based Learning Course****Recommended for grades 10, 11, and 12**

Peer Tutoring provides high school students with an organized exploratory experience to assist students through a helping relationship with their studies and personal growth and development. The course provides opportunities for the students taking the course to develop a basic understanding of individual differences and to explore career options in related fields. Peer Tutoring experiences are preplanned by the teacher trainer and any cooperating teacher under whom the tutoring is to be provided. It is conducted under the supervision of a licensed teacher. The course provides a balance of class work relating to the development and use of: (1) listening skills, (2) communication skills, (3) facilitation skills, (4) decision-making skills, and (5) teaching strategies. Students will be assigned to specific academic classes and/or study halls. In these classes, peer tutors are expected to exhibit exemplary behavior to include being on time, personal appearance/dress code, and work ethic, while keeping a journal that records numbers of students tutored, subjects assistance was provided in, and total number of minutes tutoring.

**Study Hall (10010)****2 semesters, 0 credits**

Students may choose to take a study hall if they have completed all necessary coursework and are on track with their credits. This study hall should be used to work on homework or to study for tests/quizzes. Students receive no credit for taking a study hall.

**Emergency Medical Technician****Senior Students Only****Franciscan St. Anthony Health**

The EMT course is approximately 200 hours and includes classroom, hospital clinical time & field internship. The course is divided into the following seven (7) modules: Preparatory, Airway Management, Patient Assessment, Medical Emergencies, Trauma Emergencies, Pediatric Emergencies, Special Operations. The EMS Academy offers two (2) session per year, usually in December & June at the Crown Point Location and February and July at the Highland Location. Classes meet on Monday & Thursday evenings from 6-10pm with an occasional Saturday class which is scheduled in advance for specialized training. Each course is 5 months in length. The cost of the course is \$1000 (\$500 at the beginning of the course and \$500 before module 4) and a \$25 deposit. The course fee covers all books, workbooks, EMT equipment, class polo shirt and scrubs for clinical rotations. Lake Central students enrolled and participation in this program would be eligible for 5<sup>th</sup> period late arrival and would need to turn 18 by the completion of the program. Interested students should contact Lynn Sebyan from Franciscan at 219-757-6334.

## HAMMOND AREA CAREER CENTER-CAREER-TECHNICAL EDUCATION

Lake Central High School offers juniors and seniors an opportunity to attend the Hammond Area Career Center. Programs offered are taught three hours daily. Lake Central students attending the Career Center are required to ride the bus. Students attending career training programs at the Area Career Center will spend half of the school day at the Area Career Center and the other half at Lake Central High School. In order for students to qualify to attend the Area Career Center, they must meet two of the following criteria:

- Must Be a Junior or Senior
- Pass English 10 or Algebra I ECA or English/Math ISTEP.
- Passed all required classes at Lake Central

### Collision & Refinishing Technology I & II

Course Numbers: 5544 & 5514 - **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-16 Credits

- Learn skills for entry level auto body positions.
- Earn industry leading ASE certification in painting & refinishing, structural analysis & damage repair, and non-structural analysis and damage repair.
- Learn computerized frame measuring; computerized estimate writing; shrinking and stretching methods; alignment work on doors, hoods and deck lids; use of spray painting equipment.
- Work on real vehicles in a realistic shop environment.

Vincennes credit will be awarded for the following courses:

<i>AUTO 105</i>	<i>Transportation Fundamentals</i>	<i>2 credits</i>
<i>BODY 100</i>	<i>Non-Structural Analysis &amp; Damage Repair</i>	<i>3 credits</i>
<i>BODY 100L</i>	<i>Non-Structural Analysis &amp; Damage Repair Lab</i>	<i>4 credits</i>
<i>BODY 150</i>	<i>Painting &amp; Refinishing</i>	<i>3 credits</i>
<i>BODY 150L</i>	<i>Painting &amp; Refinishing Lab</i>	<i>4 credits</i>

### Computer Information Technology I & II

Course Numbers: 5234 & 4588- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-6 Credits

Articulation: Purdue University Northwest-9 Credits

- Learn skills for entry level computer support and network administrator positions.
- Earn industry leading CompTIA A+ certifications and Cisco CCENT certification.
- Learn how to install, configure, maintain and troubleshoot computers, laptops, tablets, peripherals, and networks.
- Utilize all of the latest technologies and tools.

Vincennes credit will be awarded for the following courses:

<i>CMET 140</i>	<i>Computer Maintenance I</i>	<i>3 credits</i>
<i>CMET 185</i>	<i>Computer Maintenance II</i>	<i>3 credits</i>

### Construction Technology I & II

Course Numbers: 5580 & 5578- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-6 Credits

- Learn skills for entry level construction positions.
- Earn industry leading Home Builder's Institute (HBI) Carpentry Basic Certification.
- Learn carpentry, plumbing, electrical, masonry, painting, drywall, roofing, concrete and OSHA training.
- Classroom represents a realistic job site, complete with homes that students build.

Vincennes credit will be awarded for the following courses:

<i>CNST 100</i>	<i>Construction Seminar</i>	<i>1 credit</i>
<i>CNST 120</i>	<i>Construction Safety</i>	<i>2 credits</i>
<i>CNST 261</i>	<i>IN Residential Code for 1 &amp; 2 Family Dwellings</i>	<i>3 credits</i>

## **Criminal Justice & Law I & II**

Course Numbers: 5822 & 5824- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-12 Credits

Articulation: Indiana University-3 Credits

- Learn skills for entry level police and legal work.
- Earn CPR certification.
- Learn about the criminal justice system, traffic control, criminology and forensic science.
- Participate in mock trials and perform community service.

Vincennes credit will be awarded for the following courses:

*LAWE 100 Survey of Criminal Justice 3 credits*

*LAWE 106 Intro to Traffic Control 3 credits*

*LAWE 150 Intro to Criminology 3 credits*

*LAWE 160 Criminal Investigation 3 credits*

## **Culinary and Pastry Arts & Sciences I & II**

Course Numbers: 5440 & 5346- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-14 Credits

Articulation: Illinois Institute of Art-20 Credits, Johnson & Wales University-18 Credits, Mountain State-12 Credits, Purdue University Northwest-7 Credits, Robert Morris College-9 Credits

- Learn skills for entry level culinary arts and hospitality positions.
- Earn industry standard ServSafe and Pro-Start National Certification of Achievement.
- Learn all areas of food preparation, sanitation, personal finance, inventory, nutrition, customer relations, and management.
- Work in a professional kitchen environment with industrial grade appliances.

Vincennes credit will be awarded for the following courses:

*CULN 110 Quantity Food Production 5 credits*

*REST 100 Intro Hospitality Management 3 credits*

*REST 120 Food Service Sanitation 3 credits*

*REST 155 Quantity Food Purchasing 3 credits*

## **Dental Assisting I & II**

Course Numbers: 5203 & 5204- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Ivy Tech Community College-6 credits

Articulation: Kaplan College-12.5 credits

- Learn skills for dental assisting and dental hygienist positions.
- Earn CPR, Dental Radiological, Dental Assistant, Orthodontic Assistant certifications.
- Learn dental materials, chair-side assisting, patient preparation, office tasks, lab duties and assisting the dentist or dental hygienist.
- Work with dental equipment and chairs and have the opportunity for an internship at a real dentist office.

Ivy Tech credit will be awarded for the following courses:

*DENT 115 Preclinical Practice I 3 credits*

*DENT 124 Preventive Dentistry/Diet Nutrition 3 credits*

## Early Childhood Education I & II

Course Numbers: 5412 & 5406- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Ivy Tech Community College-12 Credits

- Learn skills for child care and pre-school teaching positions.
- Earn CPR and Child Development Associate (CDA) certifications.
- Learn child development and growth, develop lesson plans, develop the physical, emotional, social and cognitive areas of early childhood.
- Participate in a professional internship at a child care facility the second year of the program.

Ivy Tech credit will be awarded for the following courses:

<i>ECED 100</i>	<i>Introduction to Early Childhood Education</i>	<i>3 credits</i>
<i>ECED 101</i>	<i>Health, Safety and Nutrition</i>	<i>3 credits</i>
<i>ECED 103</i>	<i>Curriculum in Early Childhood Classroom</i>	<i>3 credits</i>
<i>ECED 105</i>	<i>CDA Process</i>	<i>3 credits</i>

## Electrical & Mechanical Engineering Technology I & II

Course Number: 5608 & 5606- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-20 Credits

- Learn skills needed in the high demand fields of robotics, automation, engineering, and engineering technology
- Earn Certified Production Technician (CPT) certification.
- Learn robotics and automation, engineering technology, electrical systems, mechanical systems, hydraulics and pneumatics, and programmable logic controllers (PLC's).

Vincennes credit will be awarded for the following courses:

<i>CIMT 100</i>	<i>Electronics for Automation</i>	<i>3 credits</i>
<i>CIMT 100L</i>	<i>Electronics for Automation Lab</i>	<i>3 credits</i>
<i>CIMT 125</i>	<i>Introduction to Robotics &amp; Automation</i>	<i>2 credits</i>
<i>CIMT 125L</i>	<i>Introduction to Robotics &amp; Auto Lab</i>	<i>1 credit</i>
<i>CIMT 140</i>	<i>Mechanical Drives</i>	<i>2 credits</i>
<i>CIMT 140L</i>	<i>Mechanical Drives Laboratory</i>	<i>1 credits</i>
<i>CIMT 150</i>	<i>Electronic/Electrical Application</i>	<i>2 credits</i>
<i>CIMT 150L</i>	<i>Electronic/Electrical Application Lab</i>	<i>1 credit</i>
<i>CIMT 160</i>	<i>Fluid Power Systems</i>	<i>1 credit</i>
<i>CIMT 160L</i>	<i>Fluid Power System Lab</i>	<i>1 credit</i>
<i>CIMT 175</i>	<i>Mechantronics</i>	<i>2 credits</i>
<i>CIMT 175L</i>	<i>Mechantronics Lab</i>	<i>1 credit</i>

## Emergency Medical Services

Course Number: 5210- **Work Based Learning Course**

Length/Credits: 6 high school credits

Open to: Grade 12

Dual Credit: Vincennes University-6 Credits

- Learn skills for EMT and paramedic work.
- Earn CPR, Emergency Medical Responder (EMR), and Emergency Medical Technician (EMT) certifications.
- Learn about emergency care techniques, stabilizing patients, transporting, and first responder skills.
- 1 year program that transitions seamlessly from the Health Science Careers programs.

Vincennes credit will be awarded for the following courses:

<i>EMTB 212</i>	<i>Emergency Medical Technician-Basic</i>	<i>6 credits</i>
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### **Health Science Careers I**

Course Numbers: 5276 & 5282- **Work Based Learning Course**

Length/Credits: 6 high school credits

Open to: Grades 11 and 12

Dual Credit: Ivy Tech Community College-6 Credits

- Learn about medical terminology, anatomy and physiology, health careers and nursing skills.
- Transition seamlessly to other health science areas such as Nursing and EMT.
- Utilize state of the art Anatomy-in-Clay program.

Ivy Tech credit will be awarded for the following courses:

*HLHS 100 Introduction to Health Careers 3 credits*

*HLHS 101 Medical Terminology 3 credits*

### **Health Science Careers II: Nursing**

Course Number: 5284- **Work Based Learning Course**

Length/Credits: 6 high school credits

Open to: Grade 12

Dual Credit: Ivy Tech Community College-5 Credits

- Learn skills for entry level nursing and health care work.
- Earn CPR and Certified Nursing Assistant (CNA) certification.
- Participate in an internship in a managed care facility in the second semester of the program.

Ivy Tech credit will be awarded for the following courses:

*HLHS 107 CNA Preparation 5 credits*

### **Industrial Maintenance & Welding I & II**

Course Numbers: 5776 & 5778- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Ivy Tech Community College-12 Credits

- Learn skills for entry level welding, machining and industrial maintenance work.
- Earn American Welding Society (AWS) SENSE Level 1 certification.
- Learn welding techniques, blue print reading, industrial maintenance, motor controls, and basic electricity and machinery.
- Learn in a newly remodeled classroom complete with new welding booths.

Ivy Tech credit will be awarded for the following courses:

*WELD 100 Welding Processes 3 credits*

*WELD 108 Shielded Metal Arc Welding I 3 credits*

*WELD 109 Oxy-Fuel Gas Welding & Cutting 3 credits*

*WELD 207 Gas Metal Arc (MIG) Welding 3 credits*

### **Multimedia Broadcast Academy I & II**

Course Numbers: 5986 & 5992- **Work Based Learning Course**

Length/Credits: 6 high school credits per year

Open to: Grades 11 and 12

Dual Credit: Vincennes University-3 Credits

- Learn skills for A/V production, news anchor, radio and TV engineering work.
- Learn all aspects of audio/video, radio and TV production, utilize industry standard tools such as AVID Media Composer and Final Cut Pro.
- Work in a real high definition television studio and radio both.

Vincennes credit will be awarded for the following courses:

*MCOM 102 Introduction to Audio/Video Production 3 credits*

## CAREER-TECHNICAL EDUCATION (CTE) CONCENTRATORS

Career-Technical Education Concentrators are groups of courses that create a graduation pathway that demonstrate Postsecondary-Ready Competencies. The following pages list state and locally recognized pathways. These pathways can be completed and fulfill graduation requirements for box 3 Postsecondary- Ready.

**Courses are identified as available at Lake Central (LC) or the Hammond Area Career Center (ACC).**

### Agricultural: Food Science

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
2	Advanced Nutrition and Wellness	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Architecture & Construction: Mechanical

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Principles of Engineering PLTW	Y	
6	Construction Trades II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Architecture & Construction: Architectural

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Introduction to Housing and Interior Design	Y	
2	Principles of Engineering PLTW	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Architecture & Construction: Construction

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Construction Trades I		Y
6	Construction Trades II		Y

### Architecture & Construction: Commercial & Residential Facilities Management

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Housing and Interior Design	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Architecture & Construction: Building and Facility Maintenance**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Construction Trades II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Architecture & Construction: Electrical**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Construction Trades II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Architecture & Construction: HVAC**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Construction Trades II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Arts, AV Tech & Communication: Commercial Photography**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Computer Illustration and Graphics	Y	
6	Graphic Imaging Technology	Y	Y
6	Work Based Learning Capstone, Family and Consumer Science	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Arts, AV Tech & Communication: Radio/TV**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Radio and Television I		Y
6	Graphic Imaging Technology		Y
6	Radio and Television II		Y
6	Work Based Learning Capstone, Multiple Pathways		

**Arts, AV Tech & Communication: Interactive Media**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Computer Illustration and Graphics	Y	
6	Graphic Imaging Technology	Y	Y
2	Web Design	Y	
6	Graphic Design and Layout	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Arts, AV Tech & Communication: Visual Communication**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Computer Illustration and Graphics	Y	
6	Graphic Imaging Technology	Y	Y
2	Web Design	Y	
6	Graphic Design and Layout	Y	Y
6	Work Based Learning Capstone, Family and Consumer Science	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Business & Marketing: Marketing Management, Marketing**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Introduction to Business	Y	
2	Principles of Marketing	Y	
2	Merchandising	Y	
4	Strategic Marketing	Y	
2	Business Law and Ethics	Y	
6	Work Based Learning Capstone, Business and Marketing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Business & Marketing: Accounting and Finance**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Introduction to Business	Y	
2	Introduction to Accounting	Y	
2	Principles of Business Management	Y	
2	Business Law and Ethics	Y	
6	Entrepreneurship and New Ventures Capstone	Y	
6	Work Based Learning Capstone, Business and Marketing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Business & Marketing: Entrepreneurship & Mgmt, Entrepreneurship focus**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Introduction to Business	Y	
2	Introduction to Accounting	Y	
2	Principles of Business Management	Y	
2	Principles of Marketing	Y	
2	Business Law and Ethics	Y	
2	Sports and Entertainment Marketing	Y	
4	Administrative and Office Management	Y	
6	Entrepreneurship and New Ventures Capstone	Y	
6	Work Based Learning Capstone, Business and Marketing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Business & Marketing: Marketing Mgmt, Hospitality & Tourism**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Introduction to Business	Y	
2	Principles of Marketing	Y	
2	Business Law and Ethics	Y	
4	Strategic Marketing	Y	
6	Work Based Learning Capstone, Business and Marketing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Business & Marketing: Marketing Mgmt, Sports and Entertainment**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Business	Y	
2	Principles of Marketing	Y	
2	Sports and Entertainment Marketing	Y	
4	Strategic Marketing	Y	
2	Business Law and Ethics	Y	
6	Work Based Learning Capstone, Business and Marketing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Education & Training: Education Careers**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Child Development	Y	
2	Advanced Child Development	Y	
1	Interpersonal Relationships	Y	
6	Education Professions I	Y	Y
6	Education Professions II	Y	Y
6	Work Based Learning Capstone, Family and Consumer Science	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Education & Training: Early Childhood**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
1	Child Development	Y	
2	Advanced Child Development	Y	
1	Interpersonal Relationships	Y	
6	Early Childhood Education I	Y	Y
6	Early Childhood Education II	Y	Y
6	Work Based Learning Capstone, Family and Consumer Science	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Health Science: Comprehensive Health Science &/or Emerging Careers

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
1	Interpersonal Relationships	Y	
2	Human Development and Wellness	Y	
1	Child Development	Y	
6	Health Science Education I		Y
2	Anatomy & Physiology	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Health Science: Dietetics & Nutritional Science

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Child Development	Y	
1	Nutrition and Wellness	Y	
2	Human Development and Wellness	Y	
1	Interpersonal Relationships	Y	
2	Anatomy & Physiology	Y	
6	Work Based Learning Capstone, Health Science	Y	
6	Work Based Learning Capston, Multiple Pathways	Y	

### Health Science: Biomedical

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Health Science: Nursing

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
1	Interpersonal Relationships	Y	
2	Human Development and Wellness	Y	
1	Child Development	Y	
2	Anatomy & Physiology	Y	
6	Work Based Learning Capstone, Health Science	Y	
6	Work Based Learning Capston, Multiple Pathways	Y	

**Health Science: Dental**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Interpersonal Relationships	Y	
6	Dental Careers I		Y
6	Dental Careers II		Y
6	Work Based Learning Capstone, Health Science	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Health Science: Health Science Careers, Pharmacy**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
1	Interpersonal Relationships	Y	
2	Human Development and Wellness	Y	
1	Child Development	Y	
2	Anatomy & Physiology	Y	
6	Work Based Learning Capstone, Health Science	Y	
6	Work Based Learning Capston, Multiple Pathways	Y	

**Hospitality & Human Services: Cosmetology**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Business	Y	
1	Interpersonal Relationships	Y	
1	Nutrition and Wellness	Y	
2	Advanced Nutrition and Wellness	Y	
6	Cosmetology I	Y	
6	Cosmetology II	Y	
6	Work Based Learning Capston, Multiple Pathways	Y	

**Hospitality & Human Services: Hospitality Management**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
2	Introduction to Culinary Arts and Hospitality	Y	
2	Introduction to Business	Y	
2	Advanced Nutrition and Wellness	Y	
1	Interpersonal Relationships	Y	
6	Work Based Capstone, Family and Consumer Science	Y	
6	Work Based Capstone, Multiple Pathways	Y	

### Hospitality and Human Services: Human & Social Services

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Nutrition and Wellness	Y	
2	Introduction to Business	Y	
2	Advanced Nutrition and Wellness	Y	
1	Child Development	Y	
2	Human Development and Wellness	Y	
1	Interpersonal Relationships	Y	
1	Adult Roles and Responsibilities	Y	
6	Human and Social Services I	Y	
6	Human and Social Services II	Y	
6	Work Based Capstone, Family and Consumer Science	Y	
6	Work Based Capstone, Multiple Pathways	Y	

### Information Technology: Computer Science

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Computer Science I	Y	
6	Computer Science II	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Information Technology: PC Support/IT Technology Support

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Computer Science I	Y	
6	Information Technology Support	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Information Technology: Networking

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Computer Science I	Y	
6	Information Technology Support	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Information Technology: Programming

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Digital Applications and Responsibility	Y	
2	Computer Science I	Y	
6	Computer Science II	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

### Manufacturing & Logistics: Advanced Manufacturing

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Introduction to Manufacturing	Y	
2	Principles of Engineering PLTW	Y	
6	Work Based Learning Capstone, Advanced Manufacturing	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

### Manufacturing & Logistics or STEM: Engineering

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Principles of Engineering PLTW	Y	
2	Computer Science I	Y	
2	Civil Engineering and Architecture PLTW	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

### Manufacturing & Logistics: Machine Technology

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
6	Precision Machining I	Y	
6	Precision Machining II	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

**Manufacturing & Logistics: Welding**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Introduction to Manufacturing	Y	
6	Welding Technology I		Y
6	Welding Technology II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

**Manufacturing & Logistics: Electronics**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Manufacturing	Y	
2	Introduction to Engineering Design PLTW	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

**Manufacturing & Logistics: Logistics & Supply Chain Management**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Business	Y	
2	Introduction to Manufacturing	Y	
2	Business Law and Ethics	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

**Manufacturing & Logistics: Machine Tool**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Manufacturing	Y	
6	Precision Machining I	Y	
6	Precision Machining II	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	
6	Work Based Learning Capstone, Trade and Industry	Y	

**Public Safety: Criminal Justice**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
1	Interpersonal Relationships	Y	
6	Criminal Justice I		Y
6	Criminal Justice II Advanced		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Public Safety: EMT/Paramedic**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Human Development and Wellness	Y	
6	Health Science Education I		
6	Emergency Medical Services		Y
6	Fire and Rescue I		
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Public Safety: Fire and Rescue**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Human Development and Wellness	Y	
6	Fire and Rescue I		
6	Fire and Rescue II		
6	Emergency Medical Services		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Automotive Technology**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	
6	Automotive Services Technology I	Y	Y
6	Automotive Services Technology II	Y	Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Aviation Flight & Operations**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	
2	Introduction to Engineering Design PLTW	Y	
2	Principles of Engineering PLTW	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Recreation Mobile Equipment**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Automotive Collision**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	
6	Automotive Collision Repair I		Y
6	Automotive Collision Repair II		Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Diesel Services Technology**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	
6	Work Based Learning Capstone, Multiple Pathways	Y	

**Transportation & Logistics: Recreation Mobile Equipment**

Max Credits	Course	LC	ACC
1	Preparing for College	Y	
2	Introduction to Transportation	Y	Y
6	Automotive Services Technology I	Y	Y
6	Automotive Collision Repair I		Y
6	Automotive Collision Repair II		Y
6	Automotive Services Technology II	Y	Y
6	Work Based Learning Capstone, Multiple Pathways	Y	

## LAKE CENTRAL CAREER PATHWAYS CLASS 2023 AND BEYOND

Graduation Pathway – Post-Secondary Ready CTE Concentrator Pathways  
 These are advanced courses that may have prior recommended courses or criteria to ensure success.

Cluster: Architecture and Construction				
Pathway: Construction				
DOE Code	Course		LC	ACC
5580	Construction Trades I	Concentrator Course A		Y
5578	Construction Trades II	Concentrator Course B		Y
Cluster: Arts, AV Tech and Communication				
Pathway: Interactive Media				
DOE Code	Course		LC	ACC
5232	Interactive Media	Concentrator Course A	Y	
5550	Graphic Design and Layout	Concentrator Course B	Y	
Cluster: Arts, AV Tech and Communication				
Pathway: Radio and TV				
DOE Code	Course		LC	ACC
5986	Radio and Television I	Concentrator Course A		Y
5992	Radio and Television II	Concentrator Course B		Y
Cluster: Business and Marketing				
Pathway: Accounting				
DOE Code	Course		LC	ACC
4562	Principles of Business Management	Concentrator Course A	Y	
4522	Advanced Accounting	Concentrator Course B	Y	
Cluster: Business and Marketing				
Pathway: E & M Business Management Focus				
DOE Code	Course		LC	ACC
4562	Principles of Business Management	Concentrator Course A	Y	
5914	Principles of Marketing	Concentrator Course B	Y	
Cluster: Business and Marketing				
Pathway: Office Management				
DOE Code	Course		LC	ACC
4562	Principles of Business Management	Concentrator Course A	Y	
5268	Administrative and Office Management	Concentrator Course B	Y	

Cluster: Business and Marketing Pathway: MM-Marketing				
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DOE Code	Course		LC	ACC
5914	Principles of Marketing	Concentrator Course A	Y	
5918	Strategic Marketing	Concentrator Course B	Y	

Cluster: Education and Training Pathway: Early Childhood				
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DOE Code	Course		LC	ACC
5412	Early Childhood Education I	Concentrator Course A		Y
5406	Early Childhood Education II	Concentrator Course B		Y

Cluster: Education and Training Pathway: Education Careers				
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DOE Code	Course		LC	ACC
5408	Education Professions I	Concentrator Course A	Y	
5404	Education Professions II	Concentrator Course B	Y	

Cluster: Hospitality and Human Services Pathway: Cosmetology				
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DOE Code	Course		LC	ACC
5802	Cosmetology I	Concentrator Course A	Y	
5806	Cosmetology II	Concentrator Course B	Y	

Cluster: Hospitality and Human Services Pathway: Human and Social Services				
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DOE Code	Course		LC	ACC
5336	Human and Social Services I	Concentrator Course A	Y	
5462	Human and Social Services II	Concentrator Course B	Y	

Cluster: STEM/Information Tech Pathway: Human and Social Services				
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DOE Code	Course		LC	ACC
4801	Computer Science I	Concentrator Course A	Y	
5236	Computer Science II	Concentrator Course B	Y	

Cluster: Manufacturing and Logistics Pathway: Welding				
DOE Code	Course		LC	ACC
5776	Welding Technology I	Concentrator Course A		Y
5778	Welding Technology II	Concentrator Course B		Y

Cluster: Public Safety Pathway: Criminal Justice				
DOE Code	Course		LC	ACC
5822	Criminal Justice I	Concentrator Course A		Y
5824	Criminal Justice II	Concentrator Course B		Y

Cluster: Public Safety Pathway: EMT/Paramedic				
DOE Code	Course		LC	ACC
5282	Health Science Education I	Concentrator Course A		Y
5210	Emergency Medical Services	Concentrator Course B		Y

Cluster: STEM Pathway: Engineering				
DOE Code	Course		LC	ACC
4814 or 5644	Principles of Engineering PLTW /non PLTW	Concentrator Course A	Y	
4820 or 5650	Civil Engineering and Architecture PLTW/ non PLTW	Concentrator Course B	Y	

Cluster: Transportation Pathway: Auto Collision				
DOE Code	Course		LC	ACC
5514	Automotive Collision Repair I	Concentrator Course A		Y
5544	Automotive Collision Repair II	Concentrator Course B		Y

Cluster: Transportation Pathway: Automotive Technology				
DOE Code	Course		LC	ACC
5510	Automotive Services Technology I	Concentrator Course A	Y	Y
5546	Automotive Services Technology II	Concentrator Course B	Y	Y