

# LAKE CENTRAL HIGH SCHOOL



*Course Selection Guide*  
*2017-2018*

# 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 recently completed a significant renovation 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 Theater
- Outdoor Athletic Complex with turf baseball, softball, and football fields
- 3,800 seat gym

Lake Central High School has been fully accredited by AdvanceED since opening its doors in 1966. The course offerings available to LCHS students are among the most abundant and rigorous in the state.

- 185 Course Options
- 23 AP (Advanced Placement) Courses
- 27 Dual Credit Courses plus many additional dual credits available through the Area Career Center
- 23 Career Technology Courses and Certifications
- 16 Honors/Advanced 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

- 95% Graduation Rate
- 92% Core 40 Diploma or higher
- 37% Core 40 with Academic Honors
- 73% 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

- 1,676 AP Tests taken in 2016
- 62% Earned a 3 or higher
- 31% of 2016 grads earned a 3 or higher

## Dual Credit

- 20,000+ Dual Credits earned since 2011
- Dual Credit partnerships with FIVE Indiana universities/colleges!

**LCHS CLASS OF 2016 earned more than \$13 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 is given for each course passed each semester.**



### CORE40 (minimum 46 credits)

Course and Credit Requirements	
<b>English/ Language Arts</b>	<b>8 credits</b> Including a balance of literature, composition and speech.
<b>Mathematics</b>	<b>6 credits</b> 2 credits: Algebra I 2 credits: Geometry 2 credits: Algebra II <u>Students must take a math or quantitative reasoning course each year in high school.</u>
<b>Science</b>	<b>6 credits</b> 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>	<b>6 credits</b> 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>	<b>5 credits</b> World Languages Fine Arts Career-Technical
<b>Physical Education</b>	<b>2 credits (1 Gym, 1 Pool)</b>
<b>Health and Wellness</b>	<b>1 credit</b>
<b>Personal Financial Responsibility</b>	<b>1 credit</b>
<b>Electives*</b>	<b>6 credits</b> *At least 6 credits should come from a College and Career Pathway.

**Lake Central High School - 46 Total Credits Required**

### CORE40 with Academic Honors (minimum 47 credits)

For the **Core 40 with Academic Honors** diploma, students must:

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

### CORE40 with Technical Honors (minimum 47 credits)

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

### **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.

### **END OF COURSE ASSESSMENTS (ECA's) and 10 ISTEP+**

Based on requirements from the Indiana Department of Education, students in the class of 2017 and 2018 are required to pass the ECA exam in Algebra I and English 10. Students in the class of 2019 and beyond are required to pass the 10 ISTEP+. An opportunity to appeal for a diploma will be made available to students who do not pass these requirements. (Appeals are not guaranteed. Students not passing either ECA or the 10 ISTEP+ and not receiving an appeal will not earn a diploma).

### **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  
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 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 year in advance. Those electing to graduate in January of their senior year should speak to their counselor 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.**

## 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/Thursday (Blue Day)	Tuesday/Friday (White Day)	Wednesday (Traditional Day)	Monday/Thursday (Blue Day)	Tuesday/Friday (White Day)
1st Period 7:15 - 8:45 (90)	5th Period 7:15 - 8:45 (90)	1st Period 7:15 - 8:04 (49)	1st Period 7:15 - 8:45 (90)	5th Period 7:15 - 8:45 (90)
2nd Period 8:51 - 10:21 (90)	Resource 8:51 - 10:21 (90) 8:51 - 9:21 CTE 9:21 - 10:21 Academic Assistance	2nd Period 8:10 - 8:59 (49)	2nd Period 8:51 - 10:21 (90)	Resource 8:51 - 10:21 (90) 8:51 - 9:21 CTE 9:21 - 10:21 Academic Assistance
3rd Period 10:21 - 12:27 (126) A Lunch = 10:21 - 10:51 B Lunch = 10:53 - 11:23 C Lunch = 11:25 - 11:55 D Lunch = 11:57 - 12:27	6th Period 10:21 - 12:27 (126) A Lunch = 10:21 - 10:51 B Lunch = 10:53 - 11:23 C Lunch = 11:25 - 11:55 D Lunch = 11:57 - 12:27	6th Period 10:00 - 10:49 (49) A Lunch = 10:00 - 10:30 A Class = 10:30 - 11:19 (49) B Class = 10:00 - 10:49 (49) B Lunch = 10:49 - 11:19	3rd Period 10:21 - 12:27 (126) A Lunch = 10:21 - 10:51 B Lunch = 10:53 - 11:23 C Lunch = 11:25 - 11:55 D Lunch = 11:57 - 12:27	6th Period 10:21 - 12:27 (126) A Lunch = 10:21 - 10:51 B Lunch = 10:53 - 11:23 C Lunch = 11:25 - 11:55 D Lunch = 11:57 - 12:27
4th Period 12:33 - 2:09 (96) Announcements	7th Period 12:33 - 2:09 (96) Announcements	4th Period 12:25 - 1:14 (49)	4th Period 12:33 - 2:09 (96) Announcements	7th Period 12:33 - 2:09 (96) Announcements
		7th Period 1:20 - 2:09 (49)		

### Pathways to Excellence (PtE) 8:51 – 10:21

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

### STUDENT RECORDS

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 are identified with Honors, Advanced, 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. 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

Students may take courses by online, correspondence and/or adult education during any semester. Students must be enrolled in a minimum amount of pre-designated credit hours at Lake Central during a semester and receive the approval of their respective counselor and assistant principal. Pre-approval will ensure Lake Central High School will accept the grade and that the outside institution is accredited. If a student takes a course without pre-approval, they risk losing that credit.

### 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 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 and 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.

**LAKE CENTRAL HIGH SCHOOL  
Dual Credits**

High School Course	HS CODE	College Course	Institution	Approx. Cost	No. of College Credit Hours	GPA/Requirements	Core Transfer Library
Composition	E359DC	ENG - 104	Purdue Northwest	\$25/cr hour	3	3.0	yes
Government	H571DC	POL - 101	Purdue Northwest	\$25/cr hour	3	3.0	yes
United States History	H531DC	Hist - 152	Purdue Northwest	\$25/cr hour	3	3.0	yes
Sociology	H52100	SOC - 100	Purdue Northwest	\$101/cr hour	3	3.0	yes
Spanish III Honors	F72310	SPAN 101/SPAN 102	Purdue Northwest	\$25/cr hour	6	3.0	yes
Spanish IV Honors	F72410	SPAN 201/SPAN 202	Purdue Northwest	\$25/cr hour	6	3.0	yes
French III Honors	F71310	FR 101/FR102	Purdue Northwest	\$25/cr hour	6	3.0	yes
French IV Honors	F71410	FR201/FR 202	Purdue Northwest	\$25/cr hour	6	3.0	yes
Anatomy & Physiology Honors	S88010	BIO P130/N213	Indiana University Northwest	\$25/cr hour	5	2.75	no
Financial Services (Advanced Accounting)	B21910	BUS A201	Indiana University Northwest	\$25/cr hour	3	2.75	yes
Pre-Calculus HONORS (semester 1)	M83410	MATH M125	Indiana University Northwest	\$25/cr hour	3	2.75	yes
Pre-Calculus HONORS (semester 2)	M83410	MATH M126	Indiana University Northwest	\$25/cr hour	3	2.75	yes
Chem. I Honors (ACP 1)	S87510	C101 & C 121	Indiana University	\$25/cr hour	5	2.75	no
Principles of Business Management		BUSN-101	IVY Tech	free	3	Writing: ACT English 17, PSAT 46, SAT 460, ITCC ACCUPLACER Custom Write Placer 4, ACCUPLACER Standard 80 sentence skills Reading: ACT 18, PSAT 46, SAT 460, IDOE/ITCC ACCUPLACER Custom 69, ACCUPLACER Standard 76	yes
Business Law	B23100	BUSN-201	IVY Tech	free	3		no
Business Management and Finance(Advanced Business Management)	B21610	BUSN - 105	IVY Tech	free	3		no
Information Communication and Technology I	B22900	CINS- 101	IVY Tech	free	3		yes
Principles of Marketing	B24100	MKTG-101	IVY Tech	free	3	Writing: ACT English 17, PSAT 46, SAT 460, ITCC ACCUPLACER Custom Write Placer 4, ACCUPLACER Standard 80 sentence skills Reading: ACT 18, PSAT 46, SAT 460, IDOE/ITCC ACCUPLACER Custom 69, ACCUPLACER Standard 76 Math: ACT 18, PSAT 46, SAT 460, ACCUPLACER 40 ELEM ALG or 60 ARITH, IDOE/ITCC ACCUPLACER ELEM ALG 45	no
Strategic Marketing		MKTG-230	IVY Tech	free	3	PREREQUISITE: MKTG 101 Principles of Marketing	no
Computer Programming I (Visual Basic)	B27110	SDEV-120	IVY Tech	free	3	Writing: ACT English 17, PSAT 46, SAT 460, ITCC ACCUPLACER Custom Write Placer 4, ACCUPLACER Standard 80 sentence skills Reading: ACT 18, PSAT 46, SAT 460, IDOE/ITCC ACCUPLACER Custom 69, ACCUPLACER Standard 76 Math: ACT 18, PSAT 46, SAT 460, ACCUPLACER 40 ELEM ALG or 60 ARITH, IDOE/ITCC ACCUPLACER ELEM ALG 45	no
Computer Programming II (C++)	B27210	SDEV -140	IVY Tech	free	3	PREREQUISITES: SDEV 120 Computing Logic. COREQUISITES: SDEV 120 Computing Logic.	no
Automotive Technology	basic	AUTI-100	IVY Tech	free	3	None	no
Automotive Technology	electrical	AUTI-111	IVY Tech	free	3	PREREQUISITE or COREQUISITE: AUTC 100 Introduction to Automotive	no
Automotive Technology	brakes	AUTI-121	IVY Tech	free	3	PREREQUISITE or COREQUISITE: AUTI 111, Electrical Systems I or AUTC 113 Electrical and Electronics I	no
Automotive Technology	steering	AUTI-122	IVY Tech	free	3	PREREQUISITE or COREQUISITE: AUTI 111, Electrical Systems I or AUTC 113 Electrical and Electronics I	no
Precision Machining I & II	5782	MITTC-101	IVY Tech	free	3	None	no
Precision Machining I & II	5782	MITTC-110	IVY Tech	free	3	None	no
Intro To Engineering PLTW	4812	DESN-101	IVY Tech	free	3	None	no
Principles of Eng. PLTW	4814	DESN-104	IVY Tech	free	3	PREREQUISITE: DESN 101	no
Civil Engineering Architecture PLTW	4820	DESN-105	IVY Tech Vincennes University	free	3	PREREQUISITE: DESN 101 & DESN 104	no
Gr. Img Tch II		DESN 120/155(2016)	Vincennes University	free	6	(3) 2016	

## ***HONORS/ADVANCED PLACEMENT (AP) CLASSES***

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 Friday, September 22, 2017 (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 Studio Art 2D  
AP Studio Art: 3D  
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 2  
AP Physics 1/2

#### **Social Studies**

AP American Government & Politics  
AP European History  
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  
Biology Honors  
Chemistry Honors  
Chemistry Honors (ACP 1)  
Chemistry Honors II

#### **World Languages**

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

## **COURSE REQUEST 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 **Monday, May 1, 2017**. Any students requesting schedule changes **after May 1, 2017**, will need to complete a **Schedule Change Request** form. This **must be** turned into Guidance no later than **Friday, August 4, 2017 by 3:00pm**. This cannot be emailed or faxed. The **Schedule Change Committee will review requests from Monday, August 7 through Thursday, August 10**. **Approved requests will be changed. Requests that are denied will be notified via email.**

Any students requesting schedule changes **after Monday, August 7**, will need to complete a **Schedule Change Request** form and return it to Guidance **no later than Friday, August 18, 2017 by 3:00pm**. 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 22, 2017**. 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 Friday, September 22, 2017**. 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**.

## *LCHS LIBRARY MEDIA CENTER*

It is the purpose and the mission of the LCHS Library to empower students to become knowledgeable and critical consumers of information. The Library's collection includes a wide range of books, reference materials, magazines, newspapers, and other print resources as well as numerous online database subscriptions and eBooks. The Library is equipped with an online catalog and 60 computer workstations to facilitate student research.

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. All policies found in the student handbook will be enforced in the library. Students may lose library privileges if a discipline referral is issued. 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 and after school at their discretion. During the school day, students may visit the library with their classes or with a signed pass from their teacher. 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 receive confirmation from the librarian at least one day prior to PtE. The librarian will complete the Google pass for you.

### **Study Hall**

Students who wish to visit the library during study hall must obtain a signed pass from the librarian prior to the hour 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.

### **Printing and Copying**

Networked printers are available for student use. The first **five** printed pages are free, each additional is \$.05 per page. A small desktop copier is also available for student use. Black and white copies are \$.15 per page and color copies are \$.25 per page.

### **Overdue Fines and Lost Book Fees**

Most library materials have a two week loan period and may be renewed twice by students. The overdue fine on these items is \$.05 per day, accruing on school days only. Special reserve items and reference items circulate overnight only and the overdue fine on these items is \$.30 per day, accruing on school days only. Students with library books assumed lost will be charged the replacement cost for the item, plus any overdue fines.

# LAKE CENTRAL HIGH SCHOOL 2017-2018 COURSE SELECTION SHEET

R = Required Course

Q = Quantitative Reasoning Course

D = Dual Credit Course

\* Fine Arts

1/4/2017

## CORE COURSES

ENGLISH	R	Q	D	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
English 11 AP Language & Composition				11
Composition (s)	R		D	12
World Literature (s)	R			12
English 12 AP Literature & Composition				12
Advanced Speech & Communication (s)				12
Film Literature (s)				11 12
English as a New Language				9 10 11 12

MATHEMATICS	R	Q	D	Grade Level
Algebra I	R			9
Algebra I with Lab				9
Geometry	R			9 10
Geometry with Lab				10
Geometry Honors				9 10
Algebra II	R			10 11 12
Algebra II Honors				10 11 12
PreCalculus (s)				10 11 12
Trigonometry (s)				11 12
PreCalculus/Trigonometry Honors			D	11 12
Statistics (s)				11 12
AP Statistics				11 12
AP Calculus AB				12
AP Calculus BC (2 periods)				12

PHYSICAL EDUCATION	R	Q	D	Grade Level
Secondary Phy Ed I/II-Aquatic Fit(s)	R			9
Secondary Phy Ed I/II-gym (s)	R			9
Physical Conditioning (s)				10 11 12
Sports Conditioning (s)				10 11 12
Life Saving & Water Safety (s)				10 11 12
Lifetime Fitness (s)				10 11 12
Health Education (s)	R			10 11 12
Lifeguarding				10 11 12
Advanced Life Saving (s)				10 11 12
Intro to Sports Medicine				10 11 12
Advanced Health				11 12
Swimming for Fitness				9 10 11 12
Core Conditioning				10 11 12

SCIENCE	R	Q	D	Grade Level
Biology	R			9
Biology Honors (Pre-AP Biology)				9
Chemistry	R	Q		10 11 12
Chemistry Honors		Q		10 11 12
Integrated Chemistry/Physics		Q		10 11 12
Chemistry Honors (ACP-1)		Q	D	10 11 12
Chemistry II Honors		Q	D	11 12
Earth & Space Science				10 11
Environmental Science (s)				10 11
AP Biology		Q		10 11 12
AP Chemistry (2 periods)		Q		11 12
Physics		Q		10 11 12
AP Physics 1		Q		11 12
AP Physics 2		Q		11 12
AP Physics 1&2 (2 periods)		Q		11 12
Anatomy & Physiology Honors			D	11 12
AP Environmental Science		Q		11 12
Human Genetics (s)				10 11 12
Zoology (s)				11 12
Forensic Science (s)				11 12
Marine Biology I&II (summer only) (s)				10 11 12

SOCIAL STUDIES	R	Q	D	Grade Level
World History				9 10 11 12
AP Human Geography/Geo Hist of World				9 10 11 12
U.S. History	R		D	11
AP U.S. History				10 11 12
U. S. Government (s)	R		D	12
AP American Government & Politics (s)				10 11 12
Economics (s)	R	Q		12
AP Macroeconomics (s)		Q		12
AP Microeconomics (s)		Q		12
Topics in History: Contemp U.S. Hist (s)				11 12
AP European History				10 11 12
Psychology (s)				10 11 12
AP Psychology				10 11 12
Sociology (s)			D	10 11 12

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

## ARTS

ART	R	Q	D	Grade Level
Introduction to 2-D Art *				9 10 11 12
Advanced 2-D Art II*				10 11 12
2-D Art III/IV*				11 12
Introduction to 3-D Art				9 10 11 12
Advanced 3-D Art II*				10 11 12
Ceramics I (s)*				9 10 11 12
Ceramics II (s)*				9 10 11 12
Advanced Ceramics III/IV (s)				10 11 12
AP Studio Art: 2-D*				11 12
AP Studio Art: 3-D Design (Ceramics)*				11 12

COMMUNICATIVE ARTS	R	Q	D	Grade Level
Student Media*				10 11 12
Student Media Honors (2 periods)*				11 12
Theater Arts*				9 10 11 12
Theater Arts II*				10 11 12
Theater Production Management*				9 10 11 12
Introduction to Journalism				9 10 11 12
Digital Photography (s)*				9 10 11 12
Mass Media				11 12

MUSIC	R	Q	D	Grade Level
Junior Treble Choir*				9 10 11 12
Senior Treble Choir*				10 11 12
Varsity Choir*				9 10 11 12
Concert Choir*				10 11 12
Symphonic Band*				9 10 11 12
Concert Band*				9 10 11 12
Wind Ensemble*				10 11 12
Instrumental Ensemble I (s)*				9 10 11 12
Instrumental Ensemble II (s)*				9 10 11 12
Jazz Ensemble I*				9 10 11 12
Jazz Ensemble II*				9 10 11 12
Electronic Music (s)*				9 10 11 12
Music Theory I (s) *				9 10 11 12
AP Music Theory*				10 11 12
Music History/Appreciation (s)*				9 10 11 12
Hand Bells I*				9 10 11 12
Hand Bells II*				10 11 12

## CAREER AND TECHNICAL EDUCATION

BUSINESS	R	Q	D	Grade Level
Intro to Business				9 10 11 12
Administrative Office Management			D	10 11 12
Principles of Business Management			D	10 11 12
Introduction to Accounting		Q		9 10 11 12
Advanced Accounting		Q	D	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)				10 11 12
Computer Illustration & Graphics (s)				10 11 12
Business Law & Ethics (s)			D	10 11 12
Personal Financial Resp. (s)	R	Q		11 12
Principles of Marketing (s)			D	9 10 11 12
Strategic Marketing			D	11 12
Merchandising (Fashion)				10 11 12
Sports & Entertainment Marketing				9 10 11 12
Preparing for College & Careers (s)				12
Computer Science I		Q	D	9 10 11 12
Computer Science II		Q	D	9 10 11 12
AP Principles of Computer Science		Q		9 10 11 12
AP Computer Science A		Q		9 10 11 12

FAMILY & CONSUMER SCIENCES	R	Q	D	Grade Level
Nutrition and Wellness I (s)				9 10 11 12
Nutrition and Wellness II (s)				9 10 11 12
Advanced Nutrition & Wellness (s)				10 11 12
Human Dev. & Family Wellness (s)				9 10 11 12
Adult Roles & Responsibilities (s)				11 12
Housing & Interior Design Careers (s)				9 10 11 12
Child Development & Parenting (s)				9 10 11 12
Interpersonal Relationships (s)				9 10 11 12

ENGINEERING TECHNOLOGY	R	Q	D	Grade Level
Intro to Engineering Design PLTW				9 10 11 12
Principles of Engineering PLTW (Drafting		Q		10 11 12
Civil Engineering Architecture PLTW		Q		11 12

TECHNICAL EDUCATION	R	Q	D	Grade Level
Intro to Communications/Graphics				9 10 11 12
Graphic Imaging Tech (Graph II/III) (3pd)			D	10 11 12
Intro to Manufacturing				9 10 11 12
Precision Mach II/III(Mach II/III) (3 pd)		Q	D	10 11 12
Transportation Processes				9 10 11 12
Auto Services Technology AM (3 pd)			D	11 12
Auto Services Technology PM (3 pd)			D	11 12
Don Roberts Cosmetology Program (4pd)				11 12

MISCELLANEOUS	R	Q	D	Grade Level
Peer Mentoring (s)				12
Peer Tutoring (s)				11 12
Cadet Teaching (1-3 periods)				11 12
College Courses (off campus)				12
Study Hall (no credit)				9 10 11 12
Community Service (s) (no credit)				12
Work Based Learning (1-4 periods)				11 12
Independent Research				12

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

# COURSE DESCRIPTIONS

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

## MATHEMATICS

### MATH Course Sequencing

<b>Algebra (8<sup>th</sup> Grade)</b>	<b>Geometry Honors</b>	<b>Algebra II Honors</b>	<b>PreCalculus/Trigonometry Honors or AP Statistics</b>	<b>AP Calculus AB or AP Calculus BC</b>
	<b>Algebra (9<sup>th</sup> Grade)</b>	<b>Geometry</b>	<b>Algebra II</b>	<b>Math Electives Precalculus Trigonometry Statistics (Two of three)</b>

#### 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

#### 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.

#### AP Calculus AB (M25620)

2 semesters, 2 credits

Quantitative Reasoning Course

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

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 for two consecutive periods.

#### 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.

#### Geometry (M83310)

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.

### Pre-Calculus (M25640)

1 semester, 1 credit

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 125/126 Indiana University Northwest

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.

### 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.

### Trigonometry (M25660)

1 semester, 1 credit

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.

## SCIENCE

### SCIENCE Course Sequencing

		
<b>Biology R</b>	<b>Earth Space Science</b>	<b>Integrated Chemistry/Physics</b>
<b>Biology</b>	<b>Chemistry</b>	<b>Science Electives</b> <u>Non-Honors:</u> Forensics, Environmental Science, Zoology, Human Genetics, Physics <u>Honors:</u> Anatomy and Physiology Honors, Chemistry II Honors <u>AP:</u> AP Biology, AP Chemistry, AP Environmental, AP Physics
<b>Biology Honors</b>	<b>Chemistry Honors</b>	<b>Upper Level Science Elective</b> <u>Honors:</u> Anatomy and Physiology Honors, Chemistry II Honors <u>AP:</u> AP Biology, AP Chemistry, AP Environmental, AP Physics

### Anatomy & Physiology Honors: Advanced Science, Special Topics (S5276H)

2 semesters, 2 credits

Dual Credit: Bio P130/N213 Indiana University Northwest

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)

### 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: Honors Chemistry 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

### AP Chemistry (S30600)

2 semesters, 4 credits

Quantitative Reasoning Course

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

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.

## AP Environmental Science (S30120)

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.

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

2 semesters, 2 credits

Quantitative Reasoning Course

(Formerly Physics I Honors)

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 2: Algebra-Based (S30840)

2 semesters, 2 credits

Quantitative Reasoning Course

Recommended: Algebra II (Prerequisite per College Board)

AP Physics 2 is the equivalent of the second semester college course in algebra-based physics. The course covers: fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. It also introduces electric circuits. It is a college preparatory course intended for future science and/or engineering majors. The content covered in this course will mirror content discussed in the second semester of most college Physics courses

## AP Physics 1&2 (S3094P)

2 semesters, 4 credits

Quantitative Reasoning Course

Recommended: Algebra II (Prerequisite per College Board)

AP Physics 1&2 is the equivalent of the first and second semester college course in algebra-based physics. The course covers: Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, power; mechanical waves and sound, fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. It also introduces electric circuits. The content covered in this course will mirror content discussed in the first and second semester of most college Physics courses. This course is double-blocked, and meets for two periods.

## 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 (Pre-AP Biology) (S3024H)

2 semesters, 2 credits

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

Biology Honors functions as a Pre-AP 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.

## Chemistry I (S30640)

2 semesters, 2 credits

Quantitative Reasoning Course

Recommended: Bio I and Alg 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 I Honors (S3064H) or Chemistry Honors ACP 1 (S30901)

2 semesters, 2 credits

Dual credit optional: C101 and C121 at Indiana University Bloomington

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. This course can be taken in the Chem Honors setting, Chem Honors ACP-1 (Dual Credit in C101/C121 available through Indiana University Advanced College Program).

## Chemistry II Honors (S30902)

2 semesters, 2 credits

Quantitative Reasoning Course

Dual Credit may be 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.

## 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.)

## 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.

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

1 semester, 1 credit

Recommended: Bio I, Chem I, Alg 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 case studies to investigate physical evidence from a crime scene, properties of matter, drug identification, DNA as a forensic tool, trace evidence, fire investigation, fingerprints, document analysis, and computer forensic techniques. Guest speakers in this field will give students a feel for the career opportunities that this area of study provides. Field trips to the Indiana State Crime Lab may be possible.

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

1 semester, 1 credit

Recommended: Bio I and Alg 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.

### **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.

### **Marine Biology I: Advanced Science, Special Topics**

1 semester, 1 credit

(Summer Only)

Recommended: Biology I or Biology I Honors, Incoming 11th & 12th grade  
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 fill out an application form in order to be considered for this course.

### **Marine Biology II: Advanced Science, Special Topics**

1 semester, 1 credit

(Summer Only)

Recommended: Biology I or Biology I Honors with a grade of C or better and Marine Biology I with a grade of B or better.

This course will serve as a continuation of Marine Biology I. Students will focus on marine ecology research methods by conducting several survey dives. Data obtained will be shared with the Florida Keys National Marine Sanctuary and The Nature Conservancy Reef research program. As part of the dives, students will gain an understanding of underwater communications and tethered diving techniques. Course size must be limited to 11 students due to dive boat restrictions. Students will spend approximately 90 class hours at the Marine Lab and will also need approximately 16 hours of practice skill diving as part of the course.

### **Physics I (S30840)**

2 semesters, 2 credits

Quantitative Reasoning Course

Recommended: Biology I, 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.

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

1 semester, 1 credit

Recommended: Biology I 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.

## ENGLISH Course Sequencing

			
<b>English 9</b>	<b>English 10</b>	<b>English 11</b>	<b>English Core Electives: World Literature or Advanced Speech and Composition</b>
<b>English 9 Honors</b>	<b>English 10 Honors</b>	<b>AP Language and Composition</b>	<b>AP Literature and Composition</b>

### English 9 (E10020)

2 semesters, 2 credits

Grammar, composition, literature, and vocabulary are integrated into a one-year college prep program. Grammar 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 a separate entity. Students write and deliver grade-appropriate oral and multimedia presentations.

### English 9 Honors (E1002H)

2 semesters, 2 credits

Advanced English 9 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. Required Summer Reading: *A Raisin in the Sun*, Lorraine Hansberry and *The Road*, Cormac McCarthy

### 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 a separate entity. Students write and deliver grade-appropriate oral and multimedia presentations.

### English 10 Honors (E1004H)

2 semesters, 2 credits

For the student whose language/composition scores place him or her in the gifted-talented category, Advanced English 10 is an accelerated curriculum. It involves a 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. Required Summer Reading: *The Crystal Cave*, Mary Stewart, *Left for Dead*, Peter Nelson, and *Nightfall*, Isaac Asimov and Robert Silverberg

### 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.

### English 11 AP 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 write and deliver grade-appropriate oral presentations. 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*, Tim O'Brien and one book of fiction and one book of non-fiction of choice from a list provided by the AP 11 instructors.

### Advanced Speech and Communication (E10780)

1 semester, 1 credit

Advanced Speech is a one-semester elective course. Emphasis will be placed on advanced public address, critical listening, discussion, debate, oral interpretation, and radio/television. Juniors and seniors may be eligible to take this course as dual credit through Purdue University Calumet and earn college credit while satisfying the Indiana state requirements. NOTE: seniors may take this course in lieu of a semester of World Literature.

### Composition (E10900) or Composition Dual Credit (E1090D)

1 semester, 1 credit

Dual Credit: ENG 104 Purdue University Calumet  
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. 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 Calumet and earn college credit while satisfying the Indiana state requirements. \*In addition to a writing class, each student must successfully complete World Literature.

### World Literature (E10520)

1 semester, 1 credit

World literature surveys literature written by major authors of the Western and Eastern worlds. This course takes a comparative approach to analyzing representative works produced by writers of various nationalities. Reading, writing, and vocabulary are part of this college prep course. Students write and deliver grade-appropriate oral presentations. NOTE: seniors may take Advanced Speech in lieu of a semester of World Literature.

### English 12 AP 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. A minimum grade of "C" is necessary to earn dual credit. Required Summer Reading: *The Great Train Robbery*, Michael Crichton

### 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.

## SOCIAL STUDIES

### SOCIAL STUDIES Course Sequencing

			
<b>World History</b>	<b>(10<sup>th</sup> grade- No Social Studies)</b>	<b>US History</b>	<b>Government and Economics</b>
<b>AP Human Geography/Geography History of the World</b>	<b>AP US History</b>	<b>Social Studies Elective: AP Psychology Sociology DC</b>	<b>AP American Government and AP Macro or Micro Economics</b>

#### AP American 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 American Government and Politics Examination. This class satisfies the state and school corporation requirements for U.S. Government.

#### AP European History (H15560)

2 semesters, 2 credits

Recommended: AP Human Geography and/or World History

Advanced Placement European History focuses on the basic chronology and major events in European History from 1450 to 2001. Students are expected to engage with this content through the broad themes of social, political/diplomatic, religious, intellectual/cultural, technological, and economic history. 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 will interpret and analyze primary and secondary sources, including texts, maps, statistics, and visuals. Finally, in the course of the school year students will prepare and eventually write full essays for document based questions and free response questions.

#### 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).

#### 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)

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.

#### AP Psychology (H15580)

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.

### **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.

### **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.

### **Psychology (H15320)**

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.

### **Sociology or Sociology Dual Credit (H15340, H1534D)**

1 semester, 1 credit

Dual Credit: SOC 100 Purdue University Calumet

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. Juniors and Seniors may be eligible to take this course as dual credit through Purdue University Calumet and earn college credit while satisfying the Indiana state requirements.

### **Topics in History: Contemporary U.S. History (1945-present) (H15380)**

1 semester, 1 credit

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.

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

2 semesters, 2 credits

Dual Credit: HIST152 Purdue University Calumet

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 Calumet and earn college credit while satisfying the Indiana state requirements.

### **U.S. Government (H15400) or U.S. Government Dual Credit (H1540D)**

1 semester, 1 credit

Dual Credit: POL 101 Purdue University Calumet

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 Calumet and earn college credit while satisfying the Indiana state requirements.

### **World History (H15480)**

2 semesters, 2 credits

While historical events are unique, they often are driven by similar, repeated forces. In learning the history of our world, this class will focus on eight themes: power and authority, religious and ethical systems, revolution, interactions with environment, economics, cultural interaction, empire building, and science and technology. This course is recommended to be taken before AP U.S. History. Students will be asked to analyze primary sources and to write essays displaying their knowledge and comprehension of the materials discussed

# 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, as appropriate

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 - French and Spanish Dual Credit at Honors Level for eligible students

Recommended Prerequisite: C or better Level 2 World Language, as appropriate

Required Prerequisite for Honors: Level 2 World language (as appropriate) grade C or better, or teacher recommendation

Level 3 World Languages 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 significantly 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 - French and Spanish Dual Credit at Honors Level for eligible students

Recommended Prerequisite: Level 3 World Language, as appropriate

Required Prerequisite for Honors: Level 3 World language (as appropriate) 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 significantly more rigorous than regular level three courses.

# BUSINESS

## Accounting II (B45220)

2 semesters, 2 credits

Dual Credit: BUS A201

Quantitative Reasoning Course

Recommended: Accounting

Second-year accounting emphasizes accounting practices and principles using practical applications that allow students to learn skills which can be used to gain jobs such as payroll clerk, accounts receivable and accounts payable clerk, along with data entry for QuickBooks and Peachtree Accounting software. Students work with tax preparation for business as well as individuals, financial statement preparation for sole proprietorships, partnerships, and corporations, and the use of Excel for preparing spreadsheets. Completing two years of high school accounting goes a long way in preparing students for business majors in college.

## Administrative and Office Management (B52680)

2 semesters, 2 credits

Dual Credit: BUSN 105 Ivy Tech

Recommended: Principals 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 controls 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.

## AP Computer Science A (B45700)

2 semesters, 2 credits

Quantitative Reasoning Course

Recommended: ICT I AND Computer Programming I OR Computer Programming 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.

## AP Computer Science Principles (B45680)

2 credits, 2 semesters

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.

## Business Law and Ethics (B45600)

1 semester, 1 credit

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.

## 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.

## 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. \*\* 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. \*\* IT Academy Certification

## 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

## Digital Applications and Responsibility II (ICT-2) (B45282)

1 semester, 1 credit

Recommended: ICT-1

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

## Introduction to Accounting (B45240)

2 semesters, 2 credits

Quantitative Reasoning Course

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. Accounting software such as QuickBooks and Peachtree are also learned.

## Introduction to Business (B45180)

2 semesters, 2 credits

Recommended: ICT

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.

## 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

### **Personal Financial Responsibility (B45400)**

1 semester, 1 credit

GRADUATION REQUIREMENT

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.

### **Preparing for College and Careers (B53940)**

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

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).

### **Principles of Business Management (B45620)**

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.

### **Principles of Marketing (B59140)**

1 semester, 1 credit

Dual Credit: MKTG 101 Ivy Tech

Want to be a better consumer and learn the fundamentals of marketing? In Principles of Marketing, 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.

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

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.

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

2 semesters, 2 credits

Dual Credit: Ivy Tech

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.

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

1 semester, 1 credit

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). \*\*IT Academy Certification

## **FINE ARTS**

### **Advanced Ceramics (A40403)**

1 semester, 1 credit

Recommended: Ceramics II

This course is designed to sharpen skills 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 wishing to take AP Ceramics may continue in this course for the entire school year. Students may also take this multiple times and receive credit.

### **Advanced Three-Dimensional Art (A40060)**

2 semesters, 2 credits

Recommended: Introduction to Three-Dimensional Art

Students in Advanced Three-Dimensional Art build on the sequential learning from Introduction to Three-Dimensional Art 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.

### **Advanced Two-Dimensional Art (A40042)**

2 semesters, 2 credits

Recommended: Introduction to Two-Dimensional Art

Students in Advanced Two-Dimensional Art (Art II) build on the sequential learning experiences of Introduction to Two-Dimensional Art. Students will engage in learning experiences that explore art history, art criticism, and studio production. Students must have access to a 35 mm camera.

### **Advanced Two-Dimensional Art III/IV (A40042)**

2 semesters, 2 credits

Recommended: Advanced Two-Dimensional Art

Art III provides sequential learning experiences building on the fundamental skills learned in the previous class. The production of an art portfolio will be discussed as well as art careers. The fourth year of Art is for the serious art student who wants to polish his skills and add to his portfolio. Problem solving and self-criticism is emphasized.

### **AP Studio Art: 2D (A40520)**

2 semesters, 2 credits

Recommended: Recommended Intro to Two-dimensional Art and Advanced Two-dimensional Art and Art Teacher recommendation. This course will meet concurrently with Art IV.

Studio Art-AP 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 through their sketchbook, explore artist connections, and present their work through critiques and exhibitions. Students must be willing to accept the committed challenge of a rigorous studio art program, and formal evaluations will be made according to national standards of performance through an examination of completed portfolio work.

### **AP Studio Art: 3-D Design (Ceramics) (A40500)**

2 semesters, 2 credits

Recommended: Ceramics I and II and Advanced Ceramics

This course is designed for the advanced level student who is serious about developing their skills with clay. Emphasis will be on 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 college elective.

### **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. Students will evaluate and self-critique their own work.

### **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 techniques and skill for success. Emphasis is placed on design aesthetics, more advanced glazed and staining techniques, visual problem solving, art criticism, and self-critique.

### **Introduction to Three-Dimensional Art (A40020)**

2 semesters, 2 credits

Students taking Introduction to Three-Dimensional Art 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.

### **Introduction to Two-Dimensional Art (A40000)**

2 semesters, 2 credits

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.

## **COMMUNICATIVE ARTS**

### **Advanced Theatre Arts (T42400)**

2 semesters, 2 credits

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.

### **Digital Photography: Media Arts (T40620)**

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.

### **Introduction to Journalism (T10800)**

2 semesters, 2 credits

Journalism is open to all students wishing to learn the fundamentals of media writing and production. Students will focus on historical perspectives, law and ethics, media analysis, journalistic writing, technology, design, media careers, and emerging media.

### **Mass Media (T10840)**

2 semesters, 2 credits

Recommended: 1 or more semesters of Intro to Journalism or Digital Photography and permission of instructor through application.

Students will produce the Indian Insights program. This program is seen throughout the school and on the high school Web page. Students will learn ethics of broadcast, copyright laws, leadership skills, design, camcorders, editing and authoring software, interviewing techniques, announcing techniques as well as audio and video studio equipment. After-school work time is required. Each student is responsible for his/her transportation to cover events. Second semester enrollment will depend on first semester performance

### **Public Relations (Career Exploration) (X05300)**

2 semesters, 2 credits

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.

### **Student Media (T10860)**

2 semesters, 4 credits

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 (T1086H)**

Advanced Writing and Editing (T30220)

2 semesters, 4 credits

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. This course is double-blocked, and meets for two consecutive periods. Counts as a Fine Art credit for the AHD.

### **Theatre Arts (T42420)**

2 semesters, 2 credits

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.

### **Theatre Production Management (T42480)**

2 semesters, 2 credits

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.

## MUSIC (FINE ARTS)

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

2 semesters, 2 credits

Recommended: Selection by Director

This choir requires some out-of-school work and is the most advanced large choir. Advanced music in varying styles ranging from early to contemporary will be studied. Most of the voices will be juniors and seniors.

### Junior Treble: Beginning Choir (U14820)

2 semesters, 2 credits

Girls entering choir for the first time will be placed in this choir. The main area of concentration will be learning to read music and learning to sing without hearing it first. The music will be easy to medium in difficulty. Students may graduate from this choir to the Senior Treble Choir, Varsity Choir, or Concert Choir in their sophomore or junior year.

### Senior Treble: Advanced Choir (U41880)

2 semesters, 2 credits

Recommended: Selection by Director

This choir will consist of sophomore, junior, and seniors. The music will range from medium to advance in difficulty with continued work on sight singing technique. Students will remain in this choir or be chosen to sing in the Concert Choir.

### Varsity Choir: Intermediate Choir (U41860)

2 semesters, 2 credits

Boys entering choir for the first time will be placed in this class. This choir consists of boys and girls in grades 9-12. Main concentration will be singing technique and music reading along with learning all types of music written for choirs.

### Beginning Concert Band (U41660)

(Freshman Concert Band)

2 semesters, 2 credits Grade: 9

Recommended: Complete formal instruction at the middle school level.

This developmental course is open to all freshmen students who play a band instrument at a beginning to 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.

### Intermediate Concert Band (U41680)

(Symphonic Band)

2 semesters, 2 credits Grades: 10-12

Recommended: Completion of freshman concert band.

This concert band class is open to all students who play a band instrument at an intermediate proficiency or better. 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.

### Intermediate Concert Band (U41680)

(Concert Band)

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. 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.

### Advanced Concert Band (U41700)

(Wind Ensemble)

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.

### Intermediate Jazz Band (U41642)

(Jazz Ensemble II)

2 semesters, 2 credits Grades: 9-12

This course is open to all students preferably enrolled in a concert ensemble. Pianists, guitarists, and bassists may audition into the ensemble without participation in a concert band. 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.

### Advanced Jazz Band (U41641)

(Jazz Ensemble I)

2 semesters, 2 credits Grades: 10-12

Recommended: Selection by audition or director permission

This course is open to students by audition who are enrolled in an concert ensemble. Pianists, guitarists, and bassists may audition into the ensemble without participation in a concert band. 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.

### Instrumental Ensemble (U41620)

(Percussion Ensemble I)

1 semester, 1 credit Grades: 9-12

Recommended: Complete formal instruction at the middle school level.

The percussion studies class is comprised of students who have completed middle school band as a percussionist or have successfully completed previous years of percussion studies. Students meet as a separate class to learn percussion techniques and reading skills for a wide variety of percussion instruments and literature. All students will perform with one of concert bands for all concerts and contests. There will be several required performances throughout the year.

### Instrumental Ensemble (U41620)

(Percussion Ensemble II)

1 semester, 1 credit Grades: 9-12

Recommended: Complete formal instruction at the middle school level.

The percussion studies class is comprised of students who have completed middle school band as a percussionist or have successfully completed previous years of percussion studies. Students meet as a separate class to learn percussion techniques and reading skills for a wide variety of percussion instruments and literature. All students will perform with one of concert bands for all concerts and contests. There will be several required performances throughout the year.

### 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.

### 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.

### **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 to 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.

### **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.

### **Hand Bells I: Instrumental Ensemble (U41621)**

2 semesters, 2 credits

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.

### **Hand Bells II: Instrumental Ensemble (U41622)**

2 semesters, 2 credits

Recommended: Selection by Director

Intermediate skill level is required to participate in this class. Members must attend all concerts. Music reading is required.

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

### **Adult Roles and Responsibilities (C53300)**

1 semester, 1 credit

This course is to help students prepare for their adult lives and successful independent living. Students will gain clearer awareness of their personal principles, standards, needs, and goals. They will learn to use skills in critical and creative thinking, communication, and leadership. Students will gain confidence in considering career options as well as handling their current and future jobs and careers. Topics include dating, family living, stress management, money management, housing, and consumer choices. Student's social security number is required to receive vocational funding for this class.

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

1 semester, 1 credit

Recommended: Nutrition & Wellness II

This course is designed for students who wish to develop advanced skills in food preparation. Some of the lab experiences include appetizers, desserts, complete meals, fondue, and homemade pasta. Students are responsible to select their own recipes, plan their labs, and evaluate their cooking experiences. Student's social security number is required to receive vocational funding for this class.

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

1 semester, 1 credit

This course will help the student understand the challenges and responsibilities of guiding the physical, social, emotional, and intellectual development of children. Prenatal development and care as well as the development and care of infants and toddlers will be emphasized. We will discuss nutrition, health, safety, discipline, and guidance needed for the child at each developmental stage. Information concerning children with special needs, childcare services, child protection laws and careers in childcare are also included. Student's social security number is required to receive vocational funding for this class.

### **Housing and Interiors (C53500)**

1 semester, 1 credit

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.

### **Human Development & Family Wellness (C53660)**

1 semester, 1 credit

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.

### **Interpersonal Relationships (C53640)**

1 semester, 1 credit

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 vocational funding for this class.

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

1 semester, 1 credit

This is an introductory foods course which emphasizes nutrition, recipe management, and basic skill development in food preparation techniques. Each unit of study culminates in a related lab experience, such as quick breads, fruits, vegetables, eggs, and cookies. Other areas of study are kitchen safety and sanitation. Student's social security number is required to receive vocational funding for this class.

### **Nutrition & Wellness II (C53422)**

1 semester, 1 credit

Recommended: Nutrition & Wellness I

This class builds on the basic skills learned in Nutrition and Wellness I with more advanced culinary skills added. Units on pastry, yeast breads, meats, food labeling, and meal planning and purchasing are studied. Each unit culminates with a lab experience reinforcing the key elements of the unit. Student's social security number is required to receive vocational funding for this class.

# PHYSICAL EDUCATION

## Advanced Health (P35000)

1 Semester, 1 credit

The goal of this course is to provide students preventative skills to make healthy decisions in their lives and how to positively deal with current events and issues in their lives. Students will also be given a platform to express themselves and their feelings to become better decision makers and citizens.

## Core Conditioning (P3560C)

1 semester, 1 credit

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

## Fitness Conditioning (P3560F)

1 semester, 1 credit

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.

## Intro to Sports Medicine (P3560S)

2 semesters, 2 credits

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. The last section of the class will be devoted to the students being taught CPR (cardio-pulmonary resuscitation), First Aid, and AED (Automatic External Defibrillator). There is a written exam given by the American Red Cross that must be passed and a small fee to be paid in order to become certified.

## Lifeguarding (P3560G)

2 semesters, 2 credits

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

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

## Life Saving and Water Safety (P3560W)

1 semester, 1 credit

Recommended: Minimum 15 years of age and able to swim 300 yards: 100 yards each of freestyle, elementary backstroke, and breaststroke. If student

## Advanced Life Saving (Life Saving II) (P3560W)

1 semester, 1 credit

Recommended: Life Saving and Water Safety, certification in all four Red Cross sections

This class will incorporate skills towards certification in Water Park and Water Front Lifeguarding. Additional skills in First Aid, snorkeling, underwater rescue, as well as a review of all basic skills will be covered. Completed freshman swimming during the school year at Lake Central, the Recommended for this class has been completed.

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

## Lifetime Fitness (P3560L)

1 semester, 1 credit

Recommended: Secondary Physical Education I/II

This class will incorporate a variety of activities such as: ultimate Frisbee, ping pong, yoga, snorkeling, and more. Skills, rules, and etiquette of the sport are included. Students may take only one semester of this class.

## 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.

## Sports Conditioning (P3560A)

2 semesters, 2 credits

Recommended: Secondary Physical Education I/II

The Sports Conditioning class 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.

## ENGINEERING TECHNOLOGY EDUCATION

### Introduction to Engineering Design: Project Lead the Way (V48120)

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.

### Principles of Engineering: Project Lead the Way (V48140)

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

### Civil Engineering Architecture: Project Lead the Way (V48200)

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.

## CAREER TECHNOLOGY EDUCATION

### Introduction to Communications & Graphics (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.

### Graphic Imaging Technology (V55720)

2 semesters, 6 credits

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 vocational funding for this class. Dual credits through Vincennes: *DESN 120: Computer Illustration, 3 credits and DESN 155: Computer Page Layout, 3 credits*

### 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 Vocational Machine 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.

### Precision Machining (V57820)

2 semesters, 6 credits

Quantitative Reasoning Course

Recommended: Intro to Manufacturing I and Teacher Recommendation

Vocational Machine II and III 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. Student's social security number is required to receive vocational funding for this class.

### Transportation Processes (V47980)

2 semesters, 2 credits

Vocational Automotive Technology I is an introductory course for Automotive Technology. 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 Vocational Automotive Technology I program will give each student basic auto skills which they will be able to use after completing the first year.

### **Automotive Service Technology I/II (V55100)**

2 semesters, 6 credits

Dual Credit

**Recommended:** Transportation Processes and Teacher Recommendation  
Vocational 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 third year of Vocational Automotive Technology, students will start the training program from the point he/she left off in Vocational Automotive Technology II. 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 vocational funding for this class.

Below is a list of Certified Technician areas covered in Vocational Automotive 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 Vocational Automotive Technology.

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.

The Vocational Automotive Technology program is set up in such a way that students will be trained for job placement.

## **MISCELLANEOUS**

### **Cadet Teaching (X05020)**

2 semesters, 6 credits

**Recommended:** 2.5 GPA, must be a senior, and must fill out application  
Students planning to pursue a career in education (who have at least a 2.5 grade point average) will be able to leave the high school and work with a teacher in a Lake Central elementary school. Students will observe, help with projects, and work with individual students in a teaching situation. Students will receive two credits per semester for this teaching experience. Application is required.

### **Career Exploration/Work Based Learning**

2 semesters, 0-2 credits

**Recommended Seniors only**

Confirmation of enrollment in program or place of work, written permission from parent dismissing student from school, confirmation student's current grades are in good standing, confirmation student's course credits are on target for proper diploma and graduation, final permission from principal. Career Exploration/Work-Based Learning, is a course designed to allow work-based experience for students who demonstrate achievement in a specific career area. Each student participating in an internship (in-house or off site) must have a standards-based education/training agreement developed by the job-site mentor and the student that clearly states what will be accomplished during the work-based experience. At the conclusion of the internship, each student shall submit a portfolio that documents the student's work and that includes reflections upon what has been learned.

Examples of in-house Career Exploration Work-Based Learning opportunities include:

- Auto Technology
- Computer Tech
- Graphics
- Machining
- Public Relations
- Schilling Internship
- Theatre Production

### **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 Calumet, Indiana University Northwest or Ivy Tech Community College) in the afternoon. Students must enroll in at least 2 classes each semester

### **Community Service (X05240)**

1 semester, 0 credits

**Recommended:** Must be able to provide own transportation

Students wishing to earn academic credit for community service or volunteer service may take this course as an elective. It is the student's responsibility to find a place to serve their community service and must have a minimum of 40 hours of service by the end of the semester. Students need to fill out an application in order to be considered for this

course. This course may be taken a maximum of 2 times. Students will not receive credits for this course.

### **Independent Study Research (090080)**

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

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. Interested students must fill out an application and go through an interview process.

### **Peer Tutoring (0520PT)**

1 semester, 1 credit

**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.

# AREA CAREER CENTER VOCATIONAL EDUCATION PROGRAMS

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:

1. Must be classified as a junior or senior
2. Pass English 10 or Algebra I ECA or English/Math ISTEP.
3. Passed all required classes at Lake Central

## Collision & Refinishing Technology I & II

Course Numbers: 5544 & 5514  
 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  
 Length/Credits: 6 high school credits per year  
 Open to: Grades 11 and 12  
 Dual Credit: Vincennes University-6 Credits  
 Articulation: Purdue University Calumet-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  
 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  
 Length/Credits: 6 high school credits per year  
 Open to: Grades 11 and 12  
 Dual Credit: Vincennes University-12 Credits  
 Articulation: Indiana University Northwest-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:

<i>LAWE 100</i>	<i>Survey of Criminal Justice</i>	<i>3 credits</i>
<i>LAWE 106</i>	<i>Intro to Traffic Control</i>	<i>3 credits</i>
<i>LAWE 150</i>	<i>Intro to Criminology</i>	<i>3 credits</i>
<i>LAWE 160</i>	<i>Criminal Investigation</i>	<i>3 credits</i>

## Culinary and Pastry Arts & Sciences I & II

Course Numbers: 5440 & 5346  
 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 Calumet-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:

<i>CULN 110</i>	<i>Quantity Food Production</i>	<i>5 credits</i>
<i>REST 100</i>	<i>Intro Hospitality Management</i>	<i>3 credits</i>
<i>REST 120</i>	<i>Food Service Sanitation</i>	<i>3 credits</i>
<i>REST 155</i>	<i>Quantity Food Purchasing</i>	<i>3 credits</i>

## Dental Assisting I & II

Course Numbers: 5203 & 5204  
 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:

<i>DENT 115</i>	<i>Preclinical Practice I</i>	<i>3 credits</i>
<i>DENT 124</i>	<i>Preventive Dentistry/Diet Nutrition</i>	<i>3 credits</i>

## Early Childhood Education I & II

Course Numbers: 5412 & 5406

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.

## Electrical & Mechanical Engineering Technology I & II

Course Number: 5608 & 5606

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

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

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.

- 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>

- Utilize state of the art Anatomy-in-Clay program.

Ivy Tech credit will be awarded for the following courses:

<i>HLHS 100</i>	<i>Introduction to Health Careers</i>	<i>3 credits</i>
<i>HLHS 101</i>	<i>Medical Terminology</i>	<i>3 credits</i>

## Health Science Careers II: Nursing

Course Number: 5284

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:

<i>HLHS 107</i>	<i>CNA Preparation</i>	<i>5 credits</i>
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## Industrial Maintenance & Welding I & II

Course Numbers: 5776 & 5778

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:

<i>WELD 100</i>	<i>Welding Processes</i>	<i>3 credits</i>
<i>WELD 108</i>	<i>Shielded Metal Arc Welding I</i>	<i>3 credits</i>
<i>WELD 109</i>	<i>Oxy-Fuel Gas Welding &amp; Cutting</i>	<i>3 credits</i>
<i>WELD 207</i>	<i>Gas Metal Arc (MIG) Welding</i>	<i>3 credits</i>

## Multimedia Broadcast Academy I & II

Course Numbers: 5986 & 5992

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:

<i>MCOM 102</i>	<i>Introduction to Audio/Video Production</i>	<i>3 credits</i>
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# LAKE CENTRAL HIGH SCHOOL CAREER PATHWAYS

## Lake Central High School

### Cluster: Architecture and Construction

### Pathway: Drafting/Design

### Concentration: Architectural Drafting

GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Digital Applications and Responsibility	Intro to Engineering Design
						PE-Pool if not taken during the summer	Preparing for College and Careers		
10	S1	English 10	Geometry or Algebra II	Chemistry		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Computer Science II	Principles of Engineering Design
	S2					**Fine Arts			
11	S1	English 11	Algebra II or Pre-Calculus	Physics	U.S. History	Personal Financial Responsibility	**World Language		Civil Engineering/Architec ture
	S2					Housing and Interiors			
12	S1	English 12	Pre-Calculus or Calculus or Statistics		Government	**World Language			
	S2				Economics				

**Six highlighted courses are required to complete concentration**

Postsecondary Courses Aligned for Potential Dual Credit**	
High School Course	Postsecondary Course
Computer Science II	CINS 121 Ivy Tech
Digital Applications and Responsibility	CINS 101 Ivy Tech

## Lake Central High School

### Cluster: Transportation

### Pathway: Automotive Service

### Concentration: Automotive Service Technology

GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I	Biology	World History	Health	PE-Gym if not taken during the summer	Digital Applications and Responsibility	Introduction to Transportation
	S2						PE-Pool if not taken during the summer	Preparing for College and Careers	
10	S1	English 10	Geometry	Chemistry or Integrated Chemistry-Phys ics					Automotive Services Technology I
	S2							Interpersonal Relationships	
11	S1	English 11	Algebra II	3rd Core 40 Science	U.S. History	Personal Financial Responsibility			Automotive Services Technology II
	S2							Psychology	
12	S1	English 12	Math or Quantitative Reasoning		Government				Internship
	S2				Economics				

**Six highlighted courses are required to complete concentration**

Postsecondary Courses Aligned for Potential Dual Credit**	
High School Course	Postsecondary Course
Automotive Technology	AUTC 101
Automotive Technology	AUTC 109
Automotive Technology	AUTC 113
Automotive Technology	AUTC 121



**Lake Central High School**  
 Cluster: Machine Technology - Manufacturing & Logistics  
 Pathway: Precision Machine Technology  
 Concentration: Machines



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Integrated Chem/Physics or Chemistry or Physics	Geo/History of the World or World History	**Fine Arts	PE-Gym if not taken during the summer	Interpersonal Relations	
	Preparing for College and Careers					PE -Pool if not taken during the summer	Human Development & Family Wellness		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry or Physics Biology	Introduction to Manufacturing (Precision Machine I)	**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Introduction to Business	
	Personal Financial Responsibility								
11	S1	English 11	Algebra II or Pre-Calculus	Additional 2 credits from any other Core 40 Science	U.S. History	Precision Machine II	Precision Machine II	Precision Machine II	
							Full Year Block		
12	S1	English 12	Pre-Calculus or Calculus or Statistics		Government	Precision Machine III	Precision Machine III	Precision Machine III	
					Economics			Full Year Block	

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course and postsecondary course objectives

High School Course	Postsecondary Course
Precision Machines I	INDT - 102 Ivy Tech
Precision Machine II	MTTC - 101 Ivy Tech
Precision Machine III	MTTC - 105/110 Ivy Tech



**Lake Central High School**  
 Cluster: STEM  
 Pathway: Engineering/Engineering Technology  
 Concentration: Engineering



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Introduction to Engineering Design	College Prep Elective
	Preparing for College and Careers					PE -Pool if not taken during the summer	College Prep Elective		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Principles of Engineering	College Prep Elective
	**Fine Arts								
11	S1	English 11	Algebra II or Pre-Calculus	Physics	U.S. History	Personal Financial Responsibility	**World Language	Computer Science II	AP Chemistry
	Digital Applications and Responsibility								
12	S1	English 12	Pre-Calculus or Calculus or Statistics	AP Physics	Government	Chemistry Honors ACP I	**World Language	Civil Engineering Arch	
	Economics				Chemistry II Honors				

Six highlighter courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Digital Applications and Responsibility	Introduction to Microcomputers
Computer Science II	Introduction to Software Development
Chemistry Honors ACP I	C101 and C121 - IUB



**Lake Central High School**  
 Cluster: STEM  
 Pathway: Technology  
 Concentration: Computer Science/Software Engineering



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Computer Science I	
	Preparing for College and Careers					PE -Pool if not taken during the summer			
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry or Physics		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Computer Science II	Digital Applications and Responsibility
	**Fine Arts					Digital Applications and Responsibility			
11	S1	English 11	Algebra II or Pre-Calculus	** Physics	U.S. History	Personal Financial Responsibility	**World Language	Principles of Computer Science AP	
	Web Design								
12	S1	English 12	Pre-Calculus or Calculus or Statistics	Additional 2 credits from any other Core 40 Science	Government	**World Language	AP Computer Science	College Prep Elective	
	Economics								

**Six highlighted courses are required to complete concentration**  
**Postsecondary Courses Aligned for Potential Dual Credit\*\***  
\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Digital Applications and Responsibility	Introduction to Microcomputers
Computer Science I	Computing Logic
Computer Science II	Introduction to Software Development



**Lake Central High School**  
 Cluster: Business and Marketing  
 Pathway: Business Administration  
 Concentration: Accounting & Finance



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Digital Applications and Responsibility	
	Semester Elective					PE -Pool if not taken during the summer	Preparing for College and Careers		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry or Physics		** Fine Arts	3 years of 1 language or 2 years of 2 languages ** World Language	Intro to Business	Digital Application and Responsibility II
	** Fine Arts					Principles of Marketing			
11	S1	English 11	Algebra II or Pre-Calculus		U.S. History	Personal Financial Responsibility	** World Language	Intro to Accounting	Principles of Business Management
	Business Law & Ethics								
12	S1	English 12	Pre-Calculus or Calculus or Statistics	Additional 2 credits from any other Core 40 Science	Government	** World Language	Advanced Accounting	Administrative and Office Management	
	Economics								

**Six highlighted courses are required to complete concentration**  
**Postsecondary Courses Aligned for Potential Dual Credit\*\***  
\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Advanced Accounting	Financial Concepts for Accounting
Digital Applications and Responsibility	Introduction to Microcomputers
Principles of Business Management	Introduction to Business
Administrative and Office Management	Principles of Management
Business Law and Ethics	Business Law



**Lake Central High School**  
 Cluster: Business & Marketing  
 Pathway: Business Administration  
 Concentration: Marketing Management  
 Focus: Sports & Entertainment Marketing



GRADE	SUBJECT	English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
		9	S1 English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Fine Arts	PE-Gym if not taken during the summer	Introduction to Business
S2	Digital Applications & Responsibility	PE-Pool if not taken during the summer							
10	S1 English 10	Geometry or Algebra II	Chemistry	**Sociology	Fine Arts	3 years of 1 language or 2 years of 2 languages World Language	Principles of Business Management	Health	
	S2	Psychology	Principles of Marketing						
11	S1 English 11	Algebra II or Pre-Calculus	3rd Core 40 Science	**U.S. History	Personal Financial Responsibility	World Language	Sports & Entertainment Marketing	Adult Roles and Responsibility	
	S2	Business Law & Ethics							
12	S1 **English 12	**Pre-Calculus Trig or **AP Calculus or AP Stats		**Government	Strategic Marketing	World Language	Administrative & Office Management		
	S2	Economics							

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Courses
Digital Applications and Responsibility 1	CINS 101 Introduction to Microcomputers
Principles of Business Management	BUSN 101 Introduction to Business
Administrative & Office Management	BUSN 105 Principles of Management
Strategic Marketing	MKTG 230 Consumer Behavior
Principles of Marketing	MKTG 101 Principles of Marketing



**Lake Central High School**  
 Cluster: Arts AV Technology/Communication  
 Pathway: Visual Arts  
 Concentration: Photography



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1 English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Digital Applications and Responsibility		
	S2	Digital photo	PE-Pool if not taken during the summer	Preparing for College and Careers					
10	S1 English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Web Design		
	S2	**Fine Arts	Computer Illustration and Graphics						
11	S1 English 11	Algebra II or Pre-Calculus	3rd year core 40 science	U.S. History	Personal Financial Responsibility	**World Language	Intro to Communications and Graphics		
	S2	Adv. Speech							
12	S1 English 12	Math or Quantitative Reasoning **4th year math		Government	Principles of Marketing	**World Language	Graphic Imaging Technology		
	S2	Economics							

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Principles of Marketing	Mktg 101 Ivy Tech
Digital Applications and Responsibility	CINS 101 Ivy Tech



**Lake Central High School**  
 Cluster: Arts, AV Technology, & Communication  
 Pathway: Web & Digital Communications  
 Concentration: Interactive Media



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Digital Applications and Responsibility I	
	Intro to Business					PE –Pool if not taken during the summer	Preparing for College and Careers		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry or Physics	Intro to Communicatio ns/Graphics	**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Digital Applications and Responsibility II	
	**Fine Arts					**World Language		Principles of Marketing	
11	S1	English 11	Algebra II or Pre-Calculus		U.S. History	Personal Financial Responsibility	**World Language	Computer Science 1	Web Design
	Elective					Computer Illustration & Graphics			
12	S1	English 12	Pre-Calculus or Calculus or Statistics	Additional 2 credits from any other Core 40 Science	Government	Graphic Imaging Tech	**World Language	Content Area Elective	
	Economics								

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Digital Applications and Responsibility	Introduction to Microcomputers
Computer Science 1	Computing Logic



**Lake Central High School**  
 Cluster: Arts, AV Technology, and Communications  
 Pathway: Visual Arts  
 Concentration: Visual Communications



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Integrated Chem/Physics or Chemistry or Physics	Geo/History of the World or World History	**Fine Arts	PE-Gym if not taken during the summer	Digital Applications and Responsibility I	
	Preparing for College and Careers					PE –Pool if not taken during the summer	Computer Illustration and Graphics		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry or Physics Biology		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Digital Applications and Responsibility II	
	Web Design					**World Language		Principles of Marketing	
11	S1	English 11	Algebra II or Pre-Calculus	Additional 2 credits from any other Core 40 Science	U.S. History	Personal Financial Responsibility	**World Language	Intro to Communications/Grap hics	
12	S1	English 12	Pre-Calculus or Calculus or Statistics	**World Language	Government	Graphic Imaging Technology (Graph II/III)			
	Economics								

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Digital Applications and Responsibility	Intro to Micro Computers
Principles of Marketing	MKTG-101



**Lake Central High School**  
 Cluster: Human & Social Services-Hospitality and Human Services  
 Pathway: Human & Social Services  
 Concentration: Social Work/Counseling



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	**Fine Arts	PE-Gym if not taken during the summer	Digital Applications and Responsibility	
	Preparing for College and Careers					PE -Pool if not taken during the summer	Interpersonal Relations		
10	S1	English 10	Geometry or Algebra II	Integrated Chem/Physics or Chemistry	Sociology Psychology	**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Child Development	
						**World Language		Human Development Family Wellness	
11	S1	English 11	Algebra II or Pre-Calculus	Additional 2 credits from any other Core 40 Science	U.S. History	Personal Financial Responsibility	**World Language		
	S2					Adult Roles Responsibilities			
12	S1	English 12	Pre-Calculus or Calculus or Statistics		Government		**World Language	AP PSYCH	
	S2				Economics				

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
Digital Application and Responsibility	CINS 101 IvyTech



**Lake Central High School**  
 Cluster: Health Science  
 Pathway: Nursing  
 Concentration: Nursing



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)					Recommended Courses and Electives		
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Computer Science	Nutrition and Wellness
	Digital Applications and Responsibility					PE -Pool if not taken during the summer	Preparing for College and Careers		
10	S1	English 10	Geometry or Algebra II	ACP I Chemistry Honors I*		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language	Psychology*	
	S2					**Fine Arts		**World Language	Interpersonal Relationships
11	S1	English 11	Algebra II or Pre-Calculus	Anatomy and Physiology	U.S. History	Personal Financial Responsibility	**World Language	Human Development/Family Wellness	Chemistry II Honors or AP Chemistry
	S2								
12	S1	English 12	Pre-Calculus or Calculus* or AP Calculus*	AP Biology*	Government	AP Psychology	**World Language	Advanced Speech	
	S2				Economics				

Six highlighted courses are required to complete concentration

**Postsecondary Courses Aligned for Potential Dual Credit\*\***

\*\*See individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
ACP I Chemistry Honors	C101 and C121 - IUB
AP Biology	Bio L100 - IUN
Anatomy and Physiology	Bio P130/N213 - IUN

\*Highly Recommended



## Lake Central High School

Cluster: Health Science  
 Pathway: Biomedical  
 Concentration: Biomedical



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)						Recommended Courses and Electives	
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Computer Science	
						PE--Pool if not taken during the summer	Preparing for College and Careers		
10	S1	English 10	Geometry or Algebra II	ACP I Chemistry Honors I*		**Fine Arts	3 years of 1 language or 2 years of 2 languages **World Language		
	S2					**Fine Arts			
11	S1	English 11	Algebra II or Pre-Calculus	Chemistry II Honors or AP Chemistry	U.S. History	Personal Financial Responsibility	**World Language	Anatomy and Physiology	
	S2								
12	S1	English 12	Pre-Calculus or Calculus or AP Calculus* or Statistics	AP Biology	Government	AP Physics*	**World Language		
	S2				Economics				

Six highlighted courses are required to complete concentration

### Postsecondary Courses Aligned for Potential Dual Credit\*\*

\*\*See Individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
ACP I Chemistry Honors	C101 and C121 - IUB
AP Biology	Bio L100 - IUN
Anatomy and Physiology	Bio P130/N213 - IUN

\*Highly Recommended



## Lake Central High School

Cluster: Health Science  
 Pathway: Health Care Specialties  
 Concentration: Health Science Careers  
 Focus: Pharmacy



GRADE	SUBJECT	Required Courses for Core 40 (with Honors Diploma **)						Recommended Courses and Electives	
		English/ Language Arts	Math	Science	Social Studies	Electives	Electives	Electives	Electives
9	S1	English 9	Algebra I or Geometry	Biology Honors	Geo/History of the World or World History	Health	PE-Gym if not taken during the summer	Nutrition	
	S2					Digital Applications and Responsibility		Preparing for College and Careers	
10	S1	English 10	Geometry or Algebra II	ACP Chemistry Honors I	Psychology	Fine Arts	3 years of 1 language or 2 years of 2 languages World Language	Interpersonal Relations	
	S2				Speech	Fine Arts		Human Development	
11	S1	English 11	Algebra II or Pre-Calculus	Anatomy Physiology Honors	U.S. History	Personal Financial Responsibility	World Language	AP PSYCH	
	S2					ACP 2 (Organic)			
12	S1	English 12	Pre-Calculus or Calculus	AP Biology	Government	Physics I or AP Physics	World Language	AP Chemistry	
	S2				Economics				

Six highlighted courses are required to complete concentration

### Postsecondary Courses Aligned for Potential Dual Credit\*\*

\*\*See Individual Course Frameworks for alignment of high school course standards and postsecondary course objectives

High School Course	Postsecondary Course
ACP 1	C101 & C121 - IUBL
PCTH	M125 & M126 - IUN
ANT PHY	BIO P130/N213 - IUN
AP BIOLOGY	BIO L100 - IUN