

**Lone Oak High School  
Curriculum Guide**

**2011-2012**

## **TYPES OF CURRICULA OFFERD AT *LONE OAK HIGH SCHOOL***

**Standard**: This includes the minimum requirements for graduation as designed by the Kentucky Department of Education and the McCracken County Board of Education.

**Comprehensive (Pre-College)**: This curriculum has been adopted by the Kentucky Counsel on Higher Education, and is endorsed by Kentucky's public universities. It consists of minimum courses necessary to prepare students for college and is required by state universities before a student can enroll.

**Commonwealth Diploma**: Adopted by the Kentucky State Board of Education, this curriculum includes all Kentucky requirements for graduation, the requirements for pre-college curriculum, as well as completing a minimum of four advance placement courses and a minimum of three advanced placement exams. The state will reimburse Commonwealth Diploma students for a portion of their exams if they score a composite of 8 on three exams. Three required advanced placement courses are English, science or math, and a foreign language. The fourth course may be in any additional advanced placement course.

## **SCHOOL SCHEDULING POLICY**

All courses listed in this Curriculum Guide require a sufficient number of student registrants in order to be offered during the year. If there is not sufficient interest in a particular course, it may not be provided during the upcoming year. Therefore, it is very important that students select alternate courses with the same thoughtful consideration as their first choices. Students are expected to take the classes for which they have registered. Changes in schedules will be considered only under special circumstances.

The course descriptions on the following pages are arranged by departments. Many of the classes have prerequisites that are listed prior to the course description.

## **CREDITS NEEDED FOR GRADE PLACEMENT**

Class of 2012	19 credits to be a Senior
Class of 2013 and beyond	20 credits to be a Senior 13 credits to be a Junior 6 credits to be a Sophomore

LONE OAK HIGH SCHOOL  
DIPLOMA REQUIREMENTS  
CLASS OF 2012

<b>Standard</b>	<b>Comprehensive</b>	<b>Commonwealth</b>
	Pre-College Curriculum	Pre-College Curriculum
<b>4 English Credits</b> English I English II English III English IV	<b>4 English Credits</b> English I English II English III English IV A minimum of 2 credits must be Honors or AP	<b>4 English Credits</b> English I English II English III English IV A minimum of 1 Honors credit and 1 AP credit
<b>3 Math Credits</b> Algebra I Geometry Algebra II Math Elective (Students must take 1 math class each year)	<b>3 Math Credits</b> Algebra I or Algebra II Geometry Pre-Calculus or AP Calculus Math Elective (Students must take 1 math class each year)	<b>3 Math Credits</b> Algebra I or Algebra II Geometry Pre-Calculus or AP Calculus Math Elective (Students must take 1 math class each year)
<b>3 Science Credits</b> Integrated Science I Biology Integrated Science II	<b>3 Science Credits</b> Integrated Science I or Physics Biology Chemistry	<b>3 Science Credits</b> Integrated Science I or Physics Biology Chemistry
<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History	<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History	<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History
<b>1 Health/PE Credit</b>	<b>1 Health/PE Credit</b>	<b>1 Health/PE Credit</b>
<b>1 Arts/Humanities Credit</b> 1 credit in music or 1 credit in art may be substituted	<b>1 Arts/Humanities Credit</b> 1 credit in music or 1 credit in art may be substituted	<b>1 Arts/Humanities</b> 1 credit in music or 1 credit in art may be substituted
	<b>2 World Languages Credits</b> (must be same language)	<b>3 World Languages Credits</b> (must be same language) -Must take AP Language
		Must successfully complete 4 AP classes (minimum C average in each) Must take at least 3 AP examinations in 3 of the 4 required courses areas (English, Math or Science, Foreign Language, and 1 elective)
Must complete an Individual Graduation Plan (ILP)	Must complete an Individual Graduation Plan (ILP)	Must complete an Individual Graduation Plan (ILP)
Demonstrated performance-based competency in technology	Demonstrated performance-based competency in technology	Demonstrated performance-based competency in technology
<b>11 Electives</b>	<b>9 Electives</b>	<b>8 Electives</b>
<b>26 TOTAL</b>	<b>26 TOTAL</b>	<b>26 TOTAL</b>

Lone Oak High School  
DIPLOMA REQUIREMENTS  
Graduating Class of 2013 and Beyond

<b>Standard</b>	<b>Comprehensive</b>	<b>Commonwealth</b>
	Pre-College Curriculum	Pre-College Curriculum
<b>4 English Credits</b> English I English II English III English IV	<b>4 English Credits</b> English I English II English III English IV A minimum of 2 credits must be Honors or AP	<b>4 English Credits</b> English I English II English III English IV A minimum of 1 Honors credit and 1 AP credit
<b>4 Math Credits</b> Algebra I Geometry Algebra II Math Elective (Students must take 1 math class each year)	<b>4 Math Credits</b> Algebra I or Algebra II Geometry Pre-Calculus or AP Calculus Math Elective (Students must take 1 math class each year)	<b>4 Math Credits</b> Algebra I or Algebra II Geometry Pre-Calculus or AP Calculus Math Elective (Students must take 1 math class each year)
<b>3 Science Credits</b> Integrated Science I Biology Integrated Science II	<b>3 Science Credits</b> Integrated Science I or Physics Biology Chemistry	<b>3 Science Credits</b> Integrated Science I or Physics Biology Chemistry
<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History	<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History	<b>3 Social Studies Credits</b> Economics and Government World Civilization/Geography US History
<b>1 Health/PE Credit</b>	<b>1 Health/PE Credit</b>	<b>1 Health/PE Credit</b>
<b>1 Arts/Humanities Credit</b> 1 credit in music or 1 credit in art may be substituted	<b>1 Arts/Humanities Credit</b> 1 credit in music or 1 credit in art may be substituted	<b>1 Arts/Humanities Credit</b> 1 credit in music or 1 credit in art may be substituted
	<b>2 World Languages Credits</b> (must be same language)	<b>3 World Languages Credits</b> (possibly 4 credits) (must be same language) -Must take AP Language
		Must successfully complete 4 AP classes (minimum C average in each) Must take at least 3 AP examinations in 3 of the 4 required courses areas (English, Math or Science, Foreign Language, and 1 elective)
Must complete an Individual Graduation Plan (ILP)	Must complete an Individual Graduation Plan (ILP)	Must complete an Individual Graduation Plan (ILP)
Demonstrated performance-based competency in technology	Demonstrated performance-based competency in technology	Demonstrated performance-based competency in technology
<b>12 Electives</b>	<b>10 Electives</b>	<b>9 Electives</b>
28 TOTAL	28 TOTAL	28 TOTAL

## INDIVIDUAL LEARNING PLAN

Graduates of the class of 2005 and thereafter must also complete an Individual Learning Plan and requirements for either a Career Major or a Kentucky Department of Education Career and Technical Certificate (as required and defined by Kentucky Administrative Regulations 704 KAR 3:305 and 705 KAR 4:231).

Requirements for Career Majors	Requirements for Kentucky Department of Education Career and Technical Certificates
Four (4) career related credits relevant to a career cluster or major	Four (4) credits within a career major
A structured work-based learning experience	OR
A culminating project related to the career cluster or major	Demonstration of the competencies identified for a major Dictionary Of Occupational Title (DOT)

## TIPS FOR FOUR YEAR PLANNING

The state of Kentucky also requires that all students have an Individual Learning Plan (ILP) that emphasizes career plans and courses that the students need to take while in high school. The ILP is actually begun during the 6<sup>th</sup> grade year, and then carried over to the high school.

The following pages are offered as SUGGESTIONS to help begin their ILP. The suggested schedules seen here are intended to help students plan effectively for not only their high school classes, but for their future after high school. When using this planning guide, you will need to keep these things in mind:

1. Do not make plans based on who will be in the class. Even if you register for the same classes as your friends, you probably will not have the classes at the same time.
2. Do not make plans based on who will be your teacher. Teachers' schedules change, especially in the summer!
3. Make your selection of "elective" courses based upon your career goal.
4. Do not limit yourself. If you want to achieve success, you will need further education or training beyond high school. Do not limit yourself early on by taking the easiest route. Challenge yourself, and you will be better satisfied!
5. Ask for help in planning for the future. Involve your parents, your advisor, your teachers, and your guidance counselor.

## **CORRESPONDENCE COURSE POLICY**

The approval of the Principal/designee shall be obtained before the course is taken and official record of the final grade must be received before a diploma may be issued to a student. Correspondence courses are offered for remedial purposes, not to accelerate toward early graduation.

Elective credits by correspondence course may be earned in any course listed as approved in the current high school curriculum guide.

## **PARTICIPATION IN GRADUATION EXERCISES**

- A. To participate in graduation exercises, a student must have completed required number of credits, including all required courses, prior to the dates of the programs.
- B. A student not permitted to participate in the graduation exercises will be entitled to receive a high school diploma by completing all necessary requirements for graduation.

## **VALEDICTORIANS, SALUTATORIANS AND HONOR STUDENTS**

**Valedictorian**: The highest GPA as computed in the first seven semesters for students earning Comprehensive and/or Commonwealth Diplomas will be declared Valedictorian. Valedictorians of their class with no recorded semester grade of less than an A.

**Salutarian**: Students who satisfy all the requirements for the Comprehensive or Commonwealth Diploma in the first seven semesters earning all A's and no more than one B recorded as a semester grade will be declared Salutarian of their class.

**Honor Students**: Seniors at Lone Oak High School can attain Honor Graduate Status in the following way:

- Must have earned a Grade Point Average (GPA) of at least 3.5 on a 4.0 scale.
- Must have attended high school for at least eight (8) semesters. Honor Graduate Status will be computed on grades for eight (8) semesters. Honor Graduate Senior will be recognized at "Senior Class Night". However, if in the final computation of grades, a senior falls below the 3.5 GPA level, the honor cords and the honor plaque will be withdrawn.
- Underclassmen may earn HONOR STUDENT status by maintaining a GPA of at least 3.5 on a 4.0 scale.
- Taking less than 8 classes per semester may lower a student's cumulative GPA.

GRADING SCALE		
94-100	A	Excellent
85-93	B	Good
74-84	C	Fair
65-73	D	Poor
64 and below	F	Failure

AP GRADING SCALE		
90-100	A	Excellent
80-89	B	Good
70-79	C	Fair
60-69	D	Poor
59 and below	F	Failure

## **COMPUTATION OF GRADE POINT AVERAGE**

Grade point averages are computed using the 4.0 scale and are unweighted per board policy.

## **PROGRESS REPORTS**

Progress reports will be issued every four and a half weeks. Conferences may be scheduled upon request.

## **TRANSFER STUDENTS**

All students who transfer to LOHS are scheduled on an individual basis.

## **COURSE LOAD**

Every student will register for eight (8) classes. Credit is assigned on the basis of one (1) credit per year-long course, with one-half credit being awarded at the successful completion of each semester. Vocational offerings will vary. See the Curriculum Guide or ask a counselor or advisor for specific course details.

Co-op or Vocational school students must carry a minimum of four (4) class periods of instruction at Lone Oak High School.

## **Teacher Aids, Peer Tutors, and Cross-Age Tutors**

With permission of the Principal and a 2.5 GPA, a senior student may serve as a student aide for a teacher or in the office for one period per day. Each teacher is limited to one student aid per day. Students are not awarded any credit for being a Teacher Aid.

Those students who wish to be a Peer Tutor or a Cross-Age Tutor must complete an application, have regular attendance, and no major discipline referrals. Cross-Age Tutors will be assigned to classrooms at Lone Oak Middle School, Lone Oak Elementary, or Hendron-Lone Oak Elementary. Students do receive a grade and elective credit for participating in the tutoring programs.

**Dual credit classes** offered in conjunction with West Kentucky Community & Technical College: Word Processing, Culinary, and College Prep Algebra (counts as MT65). Murray State University offers a dual credit Introduction to Teaching curriculum through the Teacher Quality Institute, Contemporary Issues in Agriculture, and Advanced Animal Science II.

**Textbooks and Library books** are furnished free of charge by the McCracken County Board of Education and must be returned in reasonable condition at the time that a student withdraws from Lone Oak High School or withdraws from a specific class.

Replacement costs for damaged books or books not returned will be the responsibility of the student's parents or guardians and must be paid before the withdrawal process can be completed.

**Macbook computers** are furnished to every student. Students may use the computers free of charge during school hours and an insurance fee may be paid to enable students to take the computer home. Students will be responsible for any damages not covered by insurance.

**Returned checks** made payable to Lone Oak High School will be assessed a \$10.00 fee per check as a result of bank charges levied against the school.

### **COURSE SELECTION AND SEQUENCE**

Students should use a Four-Year Individual Graduation Course Planner and plan their course selections based on future career goals and utilize input from parents, teachers, counselors, advisors and information recorded in their Individual Graduation Plan or ILP. Course selections may be recorded on the student's Four-Year Individual Graduation Course Planner and modified as student needs and goals change.

### **ADVANCED PLACEMENT PROGRAMS**

Advanced Placement Classes (AP) are regular high school classes taught at the college level. College credit can be awarded with the successful completion of a national standardized test, (AP Exam). The AP exam is not required to pass the course and does not affect the class grade, but **students are strongly encourage to take the exam.**

LOHS is fortunate to be a part of the Advance Kentucky program. This is a grant that is given to schools to increase student enrollment and success in the areas of English, math, and science. Students who take AP Language, Literature, Calculus, Statistics, Biology, Chemistry, Physics, Computer Science, and Environmental Science will be reimbursed for the cost of their test and will receive a \$100 incentive check for each of the above AP exams they pass with a score of 3 or higher.

McCracken County Public Schools will reimburse the costs of any AP exam in which a student scores a 3 or higher.

Please visit: [apcentral.collegeboard.com/apc/Controller.jspf](http://apcentral.collegeboard.com/apc/Controller.jspf) and/or [www.advanceky.com](http://www.advanceky.com) for further information.

AP classes may be offered at LOHS in the following subjects based on student requests and teacher availability:

Biology, Chemistry, Physics, Environmental Science, Calculus, Statistics, English Literature, English Language, French, German, Spanish, U.S. History, World History, European History, Government, Music Theory, Psychology, Computer Science and Studio Art.

A sufficient number of students must request an AP class in order for that specific class to be offered.

### **Commonwealth Middle College**

Commonwealth Middle College is a collaboration between McCracken County Schools, Marshall County Schools, and West Kentucky Technical and Vocational College to allow high school students who need a different learning environment to thrive. Students will be given the opportunity to apply during their **Sophomore** year. Students take core high school courses to receive their high school diploma and graduate while also taking college courses (free of charge). The core classes are provided by certified high school teachers and the college course are taught by WKCTC. The Commonwealth Middle College is housed on the WKCTC campus. More information can be found at [lohweb.mccracken.kyschools.us/~llwright/CMC/Welcome.html](http://lohweb.mccracken.kyschools.us/~llwright/CMC/Welcome.html).

## **Kentucky Education Excellence Scholarship (KEES Money)**

**Purpose** KEES was designed to enable high school students to earn scholarships for postsecondary study. The program contains incentives designed to award continued achievement as students' progress through high school.

### Eligibility Criteria

- Be a Kentucky resident.
- Be enrolled in a Kentucky high school after July 1, 1998.
- Meet the curriculum requirements established by the Kentucky Council on Postsecondary Education.
- Meet the minimum require grade point average (GPA) at the end of any academic year beginning after July 1, 1998.
- Not be a convicted felon.

### Program Description

Effective July 1, 1998, high school students began to earn scholarship dollars (called the "base amount") for each year in which they attained at least a 2.5 GPA. In addition, eligible students who achieve at least a composite score of 15 on the ACT by the date of graduation from high school also receive a bonus award. Upon graduation, the base amount that a student has earned in each eligible year of high school is added to the bonus award to determine a KEES award. Students will generally be eligible to receive their scholarships for a maximum of eight academic terms in an undergraduate program.

The scholarship can be used at any participating accredited public or private institution in Kentucky, including community and technical colleges. For most programs of study, the scholarship must be used within five (5) years of high school graduation. To receive the full amount, students must attend full time. Students attending at least half time, but less than full time, receive a proportionate amount; however, each academic term for which a scholarship is received will count as a full academic term, even if the award is reduced.

Students enrolled full time will receive the maximum amount for the first two academic terms of postsecondary study. To retain the maximum award for the second year, students must have completed their first two academic terms with a cumulative 2.5 GPA. For subsequent award periods, students must maintain a 3.0 cumulative GPA to retain the maximum award.

### Funding and Data Collection

The KEES program will be funded by Kentucky Lottery proceeds. Lottery revenues will be transferred to the Student Financial Aid and Advancement Trust Fund, administered by the Council on Postsecondary Education, to provide funding for this program. CPE is also responsible for developing regulations regarding KEES.

The Kentucky Department of Education is responsible for collecting data from high schools. At the end of each academic year, KDE will transmit to KHEAA a compiled list of all eligible high school students and, by the end of January each year, a list of all eligible students expecting to graduate.

### Annual Award Amounts

Listed below are the base scholarship amounts for each GPA. Students earn an award for each year they attain a 2.5 GPA or higher. **These amounts are based on the yearly GPA, not the cumulative GPA.**

GPA	Amount	GPA	Amount
2.50	\$125.00	3.30	\$325.00
2.60	150.00	3.40	350.00
2.70	175.00	3.50	375.00
2.75	187.50	3.60	400.00
2.80	200.00	3.70	425.00
2.90	225.00	3.75	437.50
3.00	250.00	3.80	450.00
3.10	275.00	3.90	475.00
3.20	300.00	4.00	500.00
3.25	312.50		

### ACT Bonus Awards

Listed below are the base awards students may earn for an ACT score of 15 or higher. The bonus award is added to the base amount. For example, if a student has a 3.20 GPA all four years, that student has earned \$1,200.00. If that student makes a 25 on the ACT, \$393 will be added, for a total of \$1,593.00.

ACT Score	Bonus
15	\$36.00
16	71.00
17	107.00
18	143.00
19	179.00
20	214.00
21	250.00
22	286.00
23	321.00
24	357.00
25	393.00
26	428.00
27	464.00
28 or above	500.00

For more information, visit [www.kheaa.com](http://www.kheaa.com).

The Pre-College Curriculum (PCC) is a series of academic courses that you take in high school to prepare you for doing college work and to provide you with skills you need in most careers.

Note: Beginning with the Class of 2004, students who are following Kentucky's pre-college curriculum will need to successfully complete two years of a Foreign Language, (same language) as a condition of "guaranteed" admission to Kentucky four-year colleges and Universities. **Students lacking the 2 years of a high school foreign language should contact the college or university's admission office for alternate enrollment options.**

Note: If you took Algebra I in the eighth grade, it will not count as a credit toward high school graduation, but it will be counted toward the pre-college curriculum.

#### REQUIRED COURSES 9<sup>TH</sup> GRADE

1. English I or Honors English I
2. Integrated Science or Honors Biology  
(Optional if taking Honors Geometry)
3. Algebra I or Honors Geometry
4. Econ. /Government
5. Health & PE
6. Elective
7. Elective
8. Elective

#### ELECTIVES – 9<sup>TH</sup> GRADE

- |   |                       |
|---|-----------------------|
| Agriculture Science                     | Read 180              |
| Drawing & Painting                      | Public Speaking       |
| Money Skills                            | Creative Writ./Poetry |
| Word Processing                         | Intro to Computers    |
| Business Law                            |                       |
| Beginning Guitar                        |                       |
| A&H Art I                               |                       |
| A&H Symphonic Band                      |                       |
| A&H Concert Choir                       |                       |
| Introduction to Engineering             |                       |
| Spanish I                               |                       |
| French I                                |                       |
| German I                                |                       |
| Life Skills                             |                       |
| Computer Assisted Design Technology     |                       |
| Overview of Technological Systems I     |                       |
| Weight Training (Baseball & Basketball) |                       |
| Weight Training 9 (Football)            |                       |
| Weight Training for Females             |                       |
| Weight Training (General)               |                       |

## REQUIRED COURSES 10<sup>TH</sup> GRADE

1. English II or Honors English II
2. Biology I, Honors Biology or Chemistry
3. Algebra I -  
Geometry, Algebra II  
or Honors Algebra II
4. World Civilization/Geography or  
AP World History
5. Art and Humanities,  
(This requirement may also be met by taking  
A & H Art, A & H Band or A & H Chorus)
6. Elective
7. Elective
8. Elective

## ELECTIVES 10<sup>TH</sup> GRADE

Any elective listed for Grade 9

AP World History  
Geo  
A&H Art II  
Accounting I  
Child Development  
Landscape & Turf Management  
Greenhouse Technology  
Ag Construction  
A&H Concert Choir  
A&H Chamber Choir  
A&H Concert Band  
A&H Symphonic Band  
Web Design  
Overview of Technological Systems II  
Spanish II  
French II  
German II

Foods / Nutritional Science

Overview of Technological Systems II  
Journalism-Yearbook (by application only)  
Health & PE

Weight Training II (Baseball & Basketball)  
Weight Training II (Football)  
Weight Training General  
Psychology  
History of Sports

## REQUIRED COURSES 11<sup>TH</sup> GRADE

## ELECTIVE COURSES 11<sup>TH</sup> GRADE

1. English III or AP English Language
2. Geometry, Algebra II  
Honors Algebra II,  
CP Math/Alg III, or Pre-Calculus
3. Phys. Sciences, (Integrated Science II,  
Chemistry or Physics) **\*note – Physics I**  
required if Honors Biology was taken in  
place of Integrated Science 9<sup>th</sup> year
4. U.S. History or AP U.S. History
5. Elective
6. Elective
7. Elective
8. Elective

Any elective listed for Grades 9 & 10

Accounting	Military History
Ag. Const. Skills	Peer Tutoring
AP Government	Cross Age Tutoring
AP European History	Health & PE
Art III	Culinary Skills
AP Music Theory	AP Psychology
Anatomy & Physiology	
AP Biology	
AP Chemistry	
Conceptual Physics I	
AP Computer Science	
Advanced Physics	
AP Environmental Science	
Introduction of Forensics	
AP French	
AP German	
AP Statistics	
Pre/Calculus/AP Calculus	
A&H Concert Choir	
A&H Chamber Choir	
A&H Concert Band	
A&H Symphonic Band	
Journalism/Newspaper(by application only)	
Journalism-Yearbook (by application only)	
Paducah Area Technology Center Courses	
Inorganic Chemistry	

#### REQUIRED COURSES 12<sup>TH</sup> GRADE

1. English IV or AP English Literature

#### ELECTIVE COURSES 12<sup>TH</sup> GRADE

Any elective listed for Grades 9,10 & 11

2. Geometry or  
Algebra II if 3<sup>rd</sup> math credit needed  
\*CP Math/AlgIII or Pre Calculus

3. Elective

4. Elective

5. Elective

6. Elective

7. Elective

8. Elective

Business Co-op  
Electronic Office (required for Bus. Co-op)  
AP Physics

German IV/International Studies  
Spanish IV/International Studies  
French IV/International Studies

Health & PE

Art IV

AP Physics

AP Studio Art

Calculus

AP Calculus

College Prep Math/Alg. III

Culinary Skills II

Peer Tutor

Paducah Area Tech. Courses

Introduction to Teaching

Educational Co-op-Classes taken at  
WKCTC (Must enroll & register through  
WKCTC)

Math for Business

Agri Math

Advanced Concepts in Math

**BUSINESS & INFORMATION TECHNOLOGY****Business & Marketing**

Accounting Services  
 Administrative Support Services  
 Business Management  
 Business Technology  
 Database Management  
 Fashion Marketing  
 Financial Services  
 Marketing  
 Retail Marketing  
 Sports & Event Marketing  
 Travel & Tourism Marketing

**Construction**

Carpentry  
 Electricity

**Education**

Family & Consumer Sciences Education  
 Industrial Education

**Human Services**

Child Development  
 Culinary & Food Services  
 Hospitality Services

**Information Technology**

Communication System  
 Construction  
 Information Technology-CISCO

**Manufacturing**

Auto Body Repair  
 Automotive Technology  
 Machine Tool  
 Welding Technologist

**Social Sciences**

Political Official

**FINE ARTS & HEALTH SCIENCES****Arts & Humanities**

Foreign Language  
 Instrumental Music  
 Performing Arts  
 Visual Art  
 Vocal Music

**Communications**

Audio Visual Technology  
 Telecommunications

**Education**

Arts & Humanities Education  
 Elementary Education (P-5)  
 Foreign Language Education  
 Health Education  
 Middle Grades Education  
 Music Education  
 Physical Education  
 Preschool Teacher  
 Social Studies  
 Special Education

**Health Science**

Cosmetology  
 Health Services

**Liberal Arts**

Liberal Arts  
 Liberal Arts - Journalism

**MATH, SCIENCE & ENGINEERING****Agriculture**

Agriscience  
 Horticulture  
 Production, Crop & or Livestock

**Education**

Agriculture Education  
 Math Education  
 Science Education

**Science & Mathematics**

Mathematical Sciences  
 Pre-Engineering  
 Pre-Med, Pre-Dental or Pre-Pharmacy

Name: \_\_\_\_\_ Grade: \_\_\_\_\_

ILP Career Goal/ Major: \_\_\_\_\_

**List required courses before choosing electives. Consider your future goals in deciding your electives. Also consider your interest in AP classes.**

Grade 9

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- Alt. \_\_\_\_\_
- Alt. \_\_\_\_\_

Grade 10

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- Alt. \_\_\_\_\_
- Alt. \_\_\_\_\_

Grade 11

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- Alt. \_\_\_\_\_
- Alt. \_\_\_\_\_

Grade 12

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_
- 6. \_\_\_\_\_
- 7. \_\_\_\_\_
- 8. \_\_\_\_\_
- Alt. \_\_\_\_\_
- Alt. \_\_\_\_\_

## **Preparation for College Admission**

### **9th-10th Grade**

1. Follow the recommended Pre-College Curriculum course selection.
2. Use the Career Cruising tool in the ILP to identify interest and to investigate careers and colleges.
3. Maintain a high GPA.
4. Investigate summer programs at universities and colleges in your career interests.
5. Become involved in community service projects and volunteer opportunities. It is also helpful to have a summer job.

### **11th Grade**

1. In October, take the PSAT/NMSQT (can be taken for practice in grade 10).
2. Continue to investigate career interest using the ILP tool.
3. Begin checking for scholarships and summer programs for juniors.
4. Begin searching for a college.
5. During the school year:
  - a. Create a list of colleges you are interested in attending.
  - b. Visit the college websites to learn admission requirements and procedures.
  - c. Determine costs.
6. In January/spring, see your counselor for more information about:
7. In the spring, take the ACT/SAT for the first time. The ACT will be given to all juniors free of charge as part of KCCT in March.
8. In the summer:
  - a. Take the ACT/SAT again to improve your score. (All college testing should be completed by October of your senior year.)
  - b. Be involved in summer programs, volunteer opportunities, community service projects, or have a summer job.
  - c. Make initial college visits.
  - d. Begin narrowing your college choices.

### **12th Grade**

1. Carry a full academic load throughout the year.
2. October - December
  - a. Finalize college applications by January 1 (check your college for correct dates).
  - b. Search and apply for scholarships. Many competitive scholarships have early deadlines.
  - c. Attend sessions with college representative (during lunch periods)
3. December - April
  - a. Obtain information regarding financial aid.
  - b. Apply for financial aid before March 15. The earlier the better.
  - c. Continue to apply for scholarship.
  - d. Make final college visits, if needed.

## **AGRICULTURE**

### **Break Down of Career Pathways for LOHS:**

Grade 9: Agriculture Science (beginning course)

#### *Choice Pathways after Grade 9:*

Animal Science Pathway

-Animal Science

-Advanced Animal Science

-Advanced Animal Science II

Greenhouse Pathway

-Greenhouse Technology I

-Greenhouse Technology II

-Landscape and Turf Management

Agriculture Construction Pathway

-Agriculture Construction Skills

-Agriculture Construction Skills II

\*Dual Credit Courses with Murray State University: Contemporary Issues and  
Advanced Animal Science II

### **Agriculture Science**

Course # 18

Grade: 9-10                      1 credit per year

Prerequisite: None

**Course Description:** This introductory Ag course is designed for freshmen or first year sophomore AG students and is based on many topics related to agriculture. The course is science based and will include a variety of agricultural experiments. Leadership development will be provided by membership and involvement in the FFA as part of the agriculture curriculum.

### **Animal Science**

Course # 33

Grade: 9-12                      1 credit per year

Prerequisite: None

**Course Description:** Animal Science develops basic knowledge and skills pertaining to livestock identification, selection, nutrition, reproduction and genetics, health management, and marketing of one or more species of farm animals. The latest biotechnological applications will be included. The content may be enhanced with appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have a supervised agricultural experience program.

### **Advanced Animal Science**

Course # 35

Grade: 10-12    1 credit per year

Prerequisite: Animal Science

**Course Description:** This class is taught as a freshman-level college course which introduces students to students to a survey of genetics, reproductive physiology, growth and development, nutrition and digestive physiology, anatomy, meat science, animal classification, current issues and overviews of dairy, poultry, equine, beef, sheep, swine, and aquaculture industries. Content may be enhanced by utilizing appropriate computer applications. Leadership development will be provided through FFA. Each student will be expected to have an agricultural experience program.

### **Advanced Animal Science II**

Course # 37

Grade: 12                      1 credit per year (dual credit with MSU)

Prerequisite: Animal Science and Advanced Animal Science

**Course Description:** This course will complete the career pathway of animal science. This is a basic course in animal science including the importance and place of livestock in agriculture types, marketing classes, and grades of beef, sheep, and swine, origin and characteristics of breeds, and the judging of beef, sheep, and swine.

### **Greenhouse Technology I**

Course # 13

Grade: 10-12 1 credit per year

Prerequisite: Agriculture Science in 9<sup>th</sup> or 10<sup>th</sup> grade or 11<sup>th</sup> or 12<sup>th</sup> first year Ag student

**Course Description:** Greenhouse Technology is designed as an introductory Horticulture/Plant Science class with content directed to greenhouse applications. This course offers instruction in the following: Plant Identification, Plant Structures/Uses, Plant propagation, Production of Nursery Plants, Greenhouse operations/management, Landscape planning/installation and Leadership Development. Leadership development will be provided by membership and involvement in the FFA as part of the agriculture curriculum.

### **Greenhouse Technology II**

Course #14

Grade: 11-12 1 credit per year

Prerequisite: Greenhouse Technology I

**Course Description:** This course is designed to build on the content learned in Greenhouse Technology I. Leadership development will be provided by membership and involvement in the FFA as part of the agriculture curriculum.

### **Landscape and Turf Management ("Sports Turf")**

Course # 21

Grades: 10-12 1 credit per year

Prerequisite: Agriculture Science

**Course Description:** This course deals with every aspect of the lawn. Students will visit area golf courses and sports fields, including Valhalla Professional Golf Course in Louisville, KY. Students will also work with our football and baseball teams on maintaining and improving their playing fields. Students will learn about different turf grasses, proper installation techniques and ways to maintain the lawn. The class will consist of 50% classroom work and 50% hands on activities outside.

### **Agricultural Construction Skills I (Advanced Ag. Mechanics)**

Course # 4

Grades: 10-12 1 credit per year

Prerequisite: Landscape and Turf Management or Agriculture Design

**Course Description:** This course provides advanced instruction and experience in Agriculture Mechanics design and construction. Course offers the following: safety, arc welding, gas welding and cutting, metal fabrication, agricultural woodworking, equipment restoration, project design, planning and construction. Leadership development will be provided by membership and involvement in the FFA as part of the agriculture curriculum.

Each student will be required to plan, design, construct and complete metal, wood or restoration project to receive credit for course and must have projects that require daily work for both semesters. Students will be responsible for having necessary protective clothing during first week of class. (Fire resistant unlined coveralls, leather welding gloves, safety glasses, protective shoes and vice-grips)

### **Agricultural Construction Skills II**

Course # 5

Grades: 11-12 1 credit per year

Prerequisite: Agricultural Construction Skills I

**Course Description:** This course expands on the concepts learned in Ag Construction Skills I.

### **Agri-Math**

Course # 38

Grade: 12 1 credit per year \*Can be used as 4th math elective\*

Prerequisite: Agriculture Science and one other Ag course

**Course Description:** This course is designed to increase the student's understanding of financial literacy in agriculture. The topics will focus on employability, career development, budgeting, and money management. The course will assist students in making important life decisions and helping them to plan for a career in agriculture.

### **Contemporary Issues in Agriculture**

Course # 199

Grades: 11-12                      1 credit per year (dual credit with MSU)

Prerequisite: Agricultural Science

**Course Description:** This course is designed to increase the understanding, awareness, and critical analysis of contemporary agricultural issues and their effect upon the social, political, economic and cultural aspects of society. Topics will include environmental, biotechnology, animal, crop, career, economy and trade, agricultural policy, food quality, safety, and international agriculture issues.

## **Word Processing**

Course # 79

Required for Business Co-op

Grade: 9–12 1 credit per year

Dual credit may be offered through WKCTC

Prerequisite: None

**Course Description:** This course includes machine operations and care of the laptops and software. The student develops "touch" keying skills, proper techniques, speed, and accuracy in keying information for business, professional and personal use. The student applies technique for proofreading, editing, word division, capitalization, and punctuation for producing appropriate copies of letters, simple business forms, tabulated information and manuscripts. Emphasis is given to the improvement of keying skills in letters, documents, tabulation and a variety of typing activities. An introduction to Numbers, Excel, Keynote, and Power Point are included. Building keyboarding speed and accuracy and taught through simulation to enhance the learning process.

## **Introduction to Computers**

Course # 102

Grades: 9-12 1 credit per year

Prerequisite: None

**Course Description:** Introduction to Computers is designed to increase the student's understanding of computers and software applications. The first semester will be focused on teacher Microsoft Office. The topics covered during this semester are Word, Excel, Power Point, and Outlook. The second semester will focus on Apple's iWorks. The topics covered during this semester are Pages, Numbers, Keynote, and Mail. This course will empower the students with versatility in computers and technology, assisting them in their future educational and employment opportunities.

## **Computer Technology Applications**

Course # 84

Grades: 10-12 1 credit per year

Prerequisite: Word Processing and/or Intro to Computers recommended, but not required

**Course Description:** Students will utilize computers and application software including operating systems, word processing, data base management, spread sheets, graphing, internet research, power point and presentations. Microsoft Office and other programs will be utilized. Purchase of supplementary materials may be required.

## **Math for Business**

Course # 105

Grade: 12 1 credit per year \*This will count as 4th math elective\*

Prerequisite: None

**Course Description:** This course is designed to increase the student's understanding of financial literacy. The topics will focus on employability, career development, budgeting, money management/ credit management, saving/investing for college planning, and consumer rights and responsibilities. The course will assist students in making important life decisions and prepare them to be knowledgeable consumers.

## **Accounting I**

Course # 86

Grades: 10–12 1 credit per year

Prerequisite: None

**Course Description:** Accounting is planning, keeping, analyzing, and interpreting financial records. Students learn how to keep records for personal and business use. The course includes: accounting careers and concepts, starting an accounting system, journalizing transactions, posting ledgers, preparing worksheets, preparing financial statements, checking accounts, reconciling a bank statement, preparing payroll and tax reports, and use of automated accounting (Numbers, Excel, Quickbooks). Reinforcement activities are completed applying the principles taught in each part. Purchase of a workbook is required for this class.

## **Business Law**

Course # 95

Grade: 9-12 1 credit per year

Prerequisite: None

**Course Description:** This course develops an understanding of legal rights and responsibilities in personal law and business law. Application activities are applied to everyday roles as consumers, citizens and workers. The pupil will have an understanding of the American legal system courts / court procedures; criminal justice system; torts and the civil justice system; oral and written contracts; sales contracts and warranties; consumer protection; employer-employee relationships; different types and uses of commercial paper checks and the banking system; insurance; real and personal property; wills and interest; legal terminology is emphasized. Workbook will be required.

### **Sports Management and Marketing**

Course # 352

Grade: 9-12 1 credit per year

**Course Description:** This course is designed to develop a thorough understanding of the marketing concepts and theories that apply to sporting events. This course is based on the business and marketing principles that includes communication skills, distribution, marketing-information management, pricing, product/service management, promotion, selling, operations, strategic management, human resource management, and the economic impact and considerations involved in the sports and event marketing industries.

### **Electronic Office**

Course # 103

Required for Business Co-op

Grade: 12 1 credit per year

Prerequisite:

Word Processing and one additional business course

2.5 or higher GPA

Application and Interview with teacher

**Course Description:** This one-year course is a capstone course designed to provide seniors with tasks that replicate a real business office. It is viewed as a significant component of the vocational preparation for seniors planning to enter office positions during senior year or upon graduation. Instruction includes text, supplemented with class discussion, job interviews, simulated filing, guest speakers, office job simulations, legal work, keyboarding, and computer skills. **This course is designed to correspond with Business Co-op and is required for students in the co-op program.**

### **Business Co-op I \*Application Only\***

Course # 107

Must take Electronic Office #103 to co-op!

Grade: 12 2 credits per year

Prerequisites: Same as Electronic Office #103

**Course Description:** Students will be allowed to leave after **third** block each day to work and earn credit at the same time. Co-op is designed for business students to practice office skills and knowledge learned in Electronic Office. This course provides a highly marketable experience for students who wish to work part time while completing other high school courses. **Acceptance into the class is by application and teacher approval only.**

### **Business Co-op II \*Application Only\***

Course # 106

Must take Electronic Office #103 to co-op!

Grade: 12 4 credits per year

Prerequisites: Same as Electronic Office #103

**Course Description:** Students will be allowed to leave after **second** block each day to work and earn credit at the same time. Co-op is designed for business students to practice office skills and knowledge learned in Electronic Office. This course provides a highly marketable experience for students who wish to work part time while completing other high school courses. **Acceptance into the class is by application and teacher approval only.**

## **ENGLISH**

**Note #1:** All Honors English Classes as well as AP English require students to complete a **Summer Reading** list before the beginning of school.

**Note #2:** A lower level English shall be a prerequisite to the next level English. (A student must pass English I before they can take English II because each level **must be taken in sequence** as required by state guidelines.)

**Note #3:** The purchase of supplementary materials may be required.

### **English I**

Course # 130

Grade: 9 1 credit per year

Prerequisite: None

**Course Description:** This course is taught as a full year course that includes a study of grammar, composition, vocabulary and various genre of literature, with an emphasis on determining and improving skill levels of individuals in these areas.

### **Honors English I**

Course # 133

Grade: 9 1 credit per year

Summer reading list required.

Prerequisite: A or B in Advanced English classes from the eighth grade.

**Course Description:** This course is taught as a full year course, which includes a study of grammar, composition, vocabulary and various genre of literature, with an emphasis on determining and improving skill levels of individuals in these areas. Various projects and activities will be incorporated for enhancement. A summer reading list will be given at registration for students to complete.

### **English II**

Course # 136

Grade: 10 1 credit per year

Prerequisite: English I

**Course Description:** This is a comprehensive survey course that focuses on literature, grammar and writing. Students will study grammar basics, write multi-paragraph essays, and study novels, short stories, plays, and essays.

### **Honors English II**

Course # 139

Grade: 10 1 credit per year

Summer reading list required.

Prerequisite: A or B average in previous semester in Honors English I or A or B in regular English in previous semester with teacher recommendation.

**Course Description:** This course encompasses all English II, plus the student will be expected to complete additional projects to enhance his or her appreciation of writing, and literature.

### **English III**

Course # 142

Grade: 11 1 credit per year

Prerequisite: English II

**Course Description:** This is a full year course that includes instruction in composition, research techniques, and exploration of literary genres, culture heritage, and literature appreciation, which focuses on American literature.

### **AP English Language** (counts as English III credit)

Course # 146

Grade: 11 1 credit per year

Summer reading list required.

Prerequisite: A or B in previous semester in Honors English II or A or B in regular English II with teacher recommendation.

**Course Description:** This is a full year course that includes instruction in composition, research techniques, and exploration of literary genres, culture heritage, and literature appreciation, which focuses on American literature. Instruction will include in depth activities and projects. Additional assignments will be required in preparation for the Advanced Placement test in English Language. The purchase of supplementary materials may be required.

#### **English IV**

Course # 148

Grade: 12 1 credit per year

Prerequisite: English III or AP English Language

**Course Description:** This course includes the study of grammar and composition through a survey of British literature, as well as the compilation of the senior writing portfolio and the completion of a senior research project.

#### **AP English Literature** (counts as English IV credit)

Course # 170

Grade: 12 1 credit per year

Summer reading list required.

Prerequisite: A or B in previous semester in AP English Language or A or B in regular English III with teacher recommendation.

**Course Description:** This course includes the study of grammar and composition through a survey of British literature, as well as the compilation of the senior writing portfolio and the completion of a senior research project. Additional assignments will be required in preparation for the Advanced Placement Test in English Literature. **The purchase of supplementary materials may be required.**

#### **Creative Writing**

Course # 153

Length of Course: 1 semester

Grade: 9-12 ½ Credit

Prerequisite: Enrolled in Poetry (Course #156)

**Course Description:** This course will examine various genres and styles of writing, focusing on format, style, syntax, perspectives and tone. Students will be required to read and write a variety of materials including poetry, prose and drama. Students will share and discuss writing by themselves, peers and outside authors.

#### **Poetry**

Course # 156

Length of Course: 1 semester

Grade: 9-12 ½ Credit

Prerequisite: Enrolled in Creative Writing (#153)

**Course Description:** This course will examine the styles, techniques, and genres of poetry. There will be an emphasis on identifying and analyzing poetic devices and their effectiveness. Students will write both original poetry and analytical explications of poems studied.

#### **Public Speaking**

Course # 150

Grade 9-12 1 Credit per year

Prerequisite: None

**Course Description:** This course will examine the styles, methods, and techniques of public speaking. Students will study historical and modern speeches, examine the various purposes of public speaking, write and present original speeches using techniques for successful public speaking.

#### **Journalism** (Newspaper)

Course # 161

Application required\*

Grade: 11-12 1 credit per year

Prerequisite: B Average and teacher approval

**Course Description:** The course includes the writing of editorials, features, and news and sports articles for the publication of a school newspaper using the Microsoft Publisher. **Acceptance into the class is by application and teacher approval only.**

**Journalism** (Yearbook)

Course # 165

Application required\*

Grade: 10-12 1 credit per year

Prerequisite: B Average and teacher approval

**Course Description:** This course introduces the unique characteristics of journalistic expression. Content includes writing, editing, and proofreading of articles for use in mass media. This course will include selling yearbooks, selling ads for the yearbook, organizing material, designing and planning layouts, writing section articles, and the final distribution of the yearbook. Students will receive hands-on experience in using computers, page design, and publishing software. **Acceptance into the class by application and interview process only. Selling double page-spread ads is required.**

**Reading 180**

Course #180

Grade 9-10 1 credit per year

**Prerequisite:** Students scoring at the novice level in reading from middle school or teacher recommendation form middle school.

**Course Description:** This course is an intensive reading intervention program designed to meet the needs of students whose reading achievement is below the proficient level. The course directly addresses individual needs through adaptive and instructional software, high-interest literature, and direct instruction in reading and writing skills.

**ENGINEERING**



Course # 67

Graduation Requirement

Grade:9-12, required for all students, available to 9th as space allows

Prerequisite: None 1 credit per year

**Course Description:** Arts and Humanities cover the history and appreciation of visual and performing arts and include the disciplines of dance, theater, music, art and literature. The main focus is to enable students to respond to all art forms through describing, analyzing, interpreting, and considering the arts as significant human achievements.

Students may complete the graduation requirement by taking Arts and Humanities #067, (a stand-alone course)

or

Completing one of the yearlong courses in Art, Choir or Band listed below that is designated to cover the Arts and Humanities components:

# 52 ARTS-HUM/Art I

# 465 ARTS-HUM/Concert Band

# 455 ARTS-HUM/Concert Choir

# 55 ARTS-HUM/Art II

# 470 ARTS-HUM/Symph Band

# 458 ARTS-HUM/Chamber Choir

### **Arts & Hum/Art I**

Course # 52

Grades: 9-12 1 credit per year (Financial assistance available)

Prerequisite: None

Materials Cost Approx. \$20

**Course Description:** Introduction to the art elements of space, color, value, line, texture, shape, and form; also the principles of balance, harmony, variety, graduation, movement, rhythm, and proportion using a variety of mediums including pencil, watercolors, ink, tempera, paper mache, and others.

### **Arts & Hum/Art II**

Course # 55

Grades: 10-12 1 credit per year

Materials Cost Approx. \$60

(Financial assistance available)

Prerequisite: Art I

**Course Description:** Application of art elements and principles learned in Art I. Medium expanded to include acrylic painting on canvas.

### **Art III**

Course # 57

Grades: 11-12 1 credit per year

Materials Cost Approx. \$50

(Financial assistance available)

Prerequisite: Grade of A or B in Art I and II and /or teacher approval.

**Course Description:** Application of art elements and principles learned in previous classes. Medium expanded to include oil painting.

### **Art IV**

Course # 60

Grades: 12 1 credit per year

Materials Cost Approx. \$50

(Financial assistance available)

Prerequisite: Completion Art I, II and III with grade of A or B and/or teacher approval.

**Course Description:** Application of art elements and principles with a goal of producing a senior portfolio and show of work done in this and previous levels. Students are encouraged to enter art competitions research possible art careers as well as apply for art awards and scholarships. Independent study encouraged as well as projects that benefit the school as a whole such as those that enhance the beauty of the facility, promote school spirit, and enrich the curriculum.

### **AP Studio Art**

Course # 63

Grade 12 1 credit per year

Prerequisite: Completion Art I, II and III with grade of A or B and /or teacher approval.

**Course Description:** This program enables highly motivated students to do college bound work while in high school. As a student in the advanced placement studio program, students are required to submit a portfolio of work for evaluation at the end of the school year.

### **Drawing/Painting**

Course # 53

Grade: 9-12 1 credit per year

Prerequisite: Enrolled in Painting

**Course Description:** This course will emphasize drawing from life and will consist of still life, figure drawing, landscape, and perspective in various mediums. Students will furnish their own drawing materials as needed including pencils, charcoal, pastels, pen and ink. Bristol board, charcoal paper (assorted colors and white), drawing paper, sketch book, mats, etc. Painting will emphasize all mediums including watercolors, acrylics, and oils. Painting from life will be featured including still life, human figure and landscape.

**Note:** Credit for this course will **not** count as an Arts & Humanities credit toward graduation, it will be an elective.

### **Introduction to 2-D Design**

Course # 56

Grade: 10-12 1/2 credit per year

Prerequisite: Art I and Art II (can be taken at the same time as Art II)

Studio Fee: \$20

**MUST ALSO ENROLL IN INTRODUCTION TO 3-D DESIGN/SCULPTURE!**

Course Description: Focus will be on the principles and elements of 2-D design. Projects will include, but not be limited to design, computer aided design, printmaking, and screen printing.

### **Introduction to 3-D Design/Sculpture**

Course # 58

Grade 10-12 1/2 credit per year

Prerequisite: Introduction to 2-D Design

Studio Fee: \$20

**MUST ALSO ENROLL IN INTRODUCTION TO 2-D DESIGN!**

Course Description: Focus will be on the principles and elements of 3-D design. Projects will include, but not be limited to sculptural ceramics, low relief casting, cold connection techniques, and installation.

### **ARTSHUM/Concert Band**

Course # 465

Grade: 9-12 1 credit per year

**Course Description:** Concert Band serves as the developmental ensemble in the instrumental program. Fundamentals are emphasized and students will explore standard band repertoire as well as wind band contemporary selections. **This is a performance-based class, which means that attendance to all performances will be mandatory. Audition and Director's approval required.**

### **ARTSHUM/Symph Band**

Course # 470

Grade: 9-12 1 credit per year

**Course Description:** Symphonic Band is for students with advanced musicality and technique and will include standard and contemporary grade 4 and 5 concert band literature as the basis for musical development. **This is a performance-based class, which means that attendance to all performances will be mandatory. Audition and Director's approval required.**

Marching Band (After school - no credit awarded)

Grades: 9-12

Prerequisite: Teacher's Approval

**Description:** Marching Band is considered an extra-curricular activity and is made up of students who are enrolled in either Symphonic Band, Concert Band or Color Guard. **During the fall, Marching Band meets after school 2 or 3 days a week.**

### **LOHS#455 ARTSHUM/Concert Choir**

Course # 455

Grade: 9-12

1 credit per year

Prerequisite: None

**Course Description:** Concert Choir is a non-auditioned performing group, which focuses on the general aspects of good vocal production and performs SATB music from all periods of history in a variety of languages.

### **ARTSHUM/Chamber Choir**

Course # 458

Grade: 9-12

1 credit per year

Prerequisite: Concert Choir / Audition with director

**Course Description:** Chamber Choir is an auditioned performing group which builds upon the singing aspects learned in Concert Choir, performing more difficult SATB music from all periods of history and in a variety of languages.

### **Basic Music Theory**

Course # 475

Grade: 9-12

1 credit per year

Prerequisite: Must be enrolled in a music class (band, choir, or guitar)

**Course Description:** This course is designed for the serious music student who wants to learn more about the composition of music including scales, key signatures, chords, instrument transposition, basic part writing, etc.

### **AP Music Theory**

Course # 476

Grades: 11-12

1 credit per year

Prerequisite: Basic Music Theory or background in choral and/or instrumental music and teacher approval.

**Course Description:** This course follows the curriculum established by the College Board in preparation for the AP exam. Students will develop the ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The course will not only study music from the standard Western tonal repertoire, but also contemporary, jazz, popular music, and music of nonwestern cultures. The course will include melodic/harmonic dictation, sight-singing, composition, realization of figured bass, and analysis of repertoire including melody, harmony, rhythm, texture, and form.

### **Beginning Guitar**

Course # 472

Grade: 9-12

1 credit per year

Prerequisite: None

**Course Description:** In this course students will learn the basics of playing guitar. Students will learn about the history of the instrument, different types of guitars, and players they should listen to for inspiration. During the course students will learn the basic guitar technique through playing scales and chords. This will be provided through folk songs. Students will understand acoustics of the instruments and be able to perform numerous songs by the end of the year. **Each student must provide their own acoustic guitar.**

### **Advanced Guitar**

Course # 471

Grade: 10-12

1 credit per year

Prerequisite: Beginning Guitar (#472)

**Course Description:** This course is designed to provide advance techniques of guitar playing, including advanced scales, modern color techniques, electric guitar techniques, and other fretted string instruments. **Each student must provide their own acoustic guitar.**

**WORLD LANGUAGE**

**Spanish I**  
Course # 200



**Course Description:** French I will focus on the introduction and development of the four basic language skills: listening comprehension, speaking, reading, and writing. Students will also be introduced to the culture, customs, and traditions of the French speaking world. Students will begin to develop connections between the use of a second language and real world situations.

### **French II**

Course # 217

Grades: 9-12                      1 credit per year

Prerequisite: Strong C in French I or teacher approval is required.

Fee: \$15 for workbook

**Course Description:** French II will help students extend the ability to use the four basic language skills: listening comprehension, speaking, reading, and writing. Students will be introduced to many higher level grammar concepts. Students will also enhance their knowledge of the culture, customs, and traditions of the French speaking world. A greater emphasis will be put on how the study of a 2nd language can translate into future goals and employment opportunities.

### **French III**

Course # 218

Grades: 10-12                      1 credit per year

Prerequisite: A or B in French II or teacher approval is required

Fee: \$15 for workbook

**Course Description:** French III is an advanced class that will focus on the development of both grammar and communication skills. Students will read a variety of literary offerings and will participate in immersion activities meant to build proficiency in the four language skills: listening comprehension, speaking, reading, and writing. Level III will also begin the necessary preparation for those students interested in taking the Advanced Placement class and exam.

### **AP French**

Course # 223

Grades: 11-12                      1 credit per year

Prerequisite: Strong B in French II or any Senior having an A or B in French II with teacher approval

Fee: \$15 for workbook

**Course Description:** This is an accelerated course where students continue foreign language study and to prepare for the A P French Language Exam. AP French continues the development of the four basic skills in foreign language study: listening comprehension, reading, speaking, writing as well as the culture, customs and traditions of the French speaking world. Students will read a variety of offerings from French literature. This course follows the curriculum established by the College Board in preparation for the AP exam, which is encouraged to be taken in order for the student to receive college credit at the college level.

### **French IV**

Course # 221

Grade: 12                                      1 credit per year

Prerequisite: Level I, II and AP; A or B in AP; teacher approval

Fee: \$15 for workbook

**Course Description:** French IV is an advanced class which will focus on grammar review and language immersion. Students will be expected to participate in role-playing projects that will extend their ability to communicate in French and prepare them for an upper level college curriculum. Students may also use this course as a preparation for the AP exam.

### **German I**

Course # 227

Grades: 9-11                                      1 credit per year

Prerequisite: Strong C in English is highly recommended

Fee: \$15 for workbook

**Course Description:** German I will focus on the introduction and development of the four basic language skills: listening comprehension, speaking, reading, and writing. Students will also be introduced to the culture, customs, and traditions of the German speaking world. Students will begin to develop connections between the use of a second language and real world situations.

### **German II**

Course # 229

Grade: 10-12 1 credit per year

Prerequisite: Strong C in German I or teacher approval is required

Fee: \$15 for workbook

**Course Description:** German II will help students extend the ability to use the four basic language skills: listening comprehension, speaking, reading, and writing. Students will be introduced to many higher level grammar concepts. Students will also enhance their knowledge of the culture, customs, and traditions of the German speaking world. A greater emphasis will be put on how the study of a 2nd language can translate into future goals and employment opportunities.

### **German III**

Course # 230

Grades: 11-12

Prerequisite: German I, and II or teacher approval is required

Fee: \$15 for workbook

**Course Description:** German III is an advanced class that will focus on the development of both grammar and communication skills. Students will read a variety of literary offerings and will participate in immersion activities meant to build proficiency in the four language skills: listening comprehension, speaking, reading, and writing. Level III will also begin the necessary preparation for those students interested in taking the Advanced Placement class and exam.

### **AP German**

Course # 232

Grades: 11-12 1 credit per year

Fee: \$15 for workbook

Prerequisite: Strong B in German III or teacher approval required.

**Course Description:** AP German is an accelerated class where students continue foreign language study to prepare for the AP German Language Exam. AP German focuses listening, reading, writing, and speaking the language and follows the curriculum established by the College Board in preparation for the AP exam, which is encouraged to be taken in order for the student to receive college credit at the college level.

### **German IV**

Course # 231

Grade 12 1 credit per year

Prerequisite: Level I, II and AP; A or B in AP; teacher approval

Fee: \$15 for workbook

**Course Description:** German IV is an advanced class which will focus on grammar review and language immersion. Students will be expected to participate in role-playing projects that will extend their ability to communicate in German and prepare them for an upper level college curriculum. Students may also use this course as a preparation for the AP exam.

## **FAMILY & CONSUMER SCIENCES**

### **Life Skills**

Course # 250

Grade: 9-10 1 credit per year

Fees: \$10 sewing project and \$20.00 food lab fee

Prerequisites: None

**Course Description:** This course includes core competencies in basic skills needed throughout life including: foods and nutrition, human development, housing and home furnishings management and family economics, and clothing and textiles. It also provides an opportunity for students to decided future areas for concentrated study. Portfolio writings are required.

### **Foods**

Course # 254 Semester 1 followed by Nutritional Science (#255)

Grade: 10-12 1/2 credit per semester Fee: \$20.00 food lab fee

Prerequisite: Life Skills strongly recommended

**Course Description:** This course addresses the practical problems related to food provision, attitudes toward food, nutrition facts, special health problems, diets, management of food resources, preparation skills, and an awareness of careers in nutrition/food service. Portfolio writings are required. Students enrolled in this class should be enrolled in Relationships or Nutritional Science the second semester.

### **Nutritional Science** (offered 2nd Semester following 254 Foods)

Course # 255

Course Length: 1 semester

**Grade: 10-12** 1/2 credit per semester Fee: \$20.00 food lab fee

Prerequisite: **Foods**

**Course Description:** Nutritional Science is an interdisciplinary course that has a variety of applications to everyday life. Much of the study and work in this course is directed toward providing students with knowledge of nutrition concepts and the various relationships between nutrition and science. Scientific methods are used to conduct laboratory experiments with food. Students explore career possibilities in science, nutrition, microbiology, family and consumer sciences, dietetics and various research specialties. Students enrolled in this class have usually been enrolled in **Foods, 254**, semester one.

### **Relationships**

Course # 267

Course Length: 1 semester

Grade: 10-12 1/2 credit per semester

Prerequisite: Enrolled in Child Development

**Course Description:** This course is designed to address the knowledge, skills, attitudes and behaviors individuals need in order to develop positive relationships among family members, peers, community members, colleagues, romantic partners, etc. Topics covered include communication, decision making skills, conflict resolution, goal setting, friendships, family relationships, dating, marriage, parenting, etc.

### **Child Development**

Course #263

Course Length: 1 semester

Grade: 10-12 1/2 credit per semester

Prerequisite: Enrolled in Relationships

**Course Description:** This course is designed to aid students in developing parenting and caregiving skills that can be applied in a variety of situations. Major topics include stages of human growth and development, recognizing effects of heredity and environment on human growth and development, prenatal development, preparing for birth, promoting optimum growth and development in the infancy, toddler, and preschool stages and meeting the needs of exceptional children. Careers in child/human development is explored.

### **Culinary Skills**

Course # 257

Dual credit offered through WKCTC

Grade 11-12 1 credit per year Fees: \$30.00 food lab fee per semester

Prerequisite: One semester of Foods

**Course Description:** This course is designed to provide training in the area of food service. Career decisions and demands on family life are explored as well as skills and concepts related to food service. Laboratory instruction is included. Students will use nutritional information in preparing and serving food, practice culinary skills, prepare a variety of gourmet foods, and practice food presentation techniques. KY Skills Standards Test in Culinary Arts is also included.

### **Culinary Skills II**

Course # 258

Dual credit offered through WKCTC

Grade 12 1 credit per year

Fees: \$30.00 food lab fee per semester

Prerequisite: Culinary Skills

**Course Description:** This course is designed to expand on skills taught in Culinary I.

### **Child Development Services**

Course # 251

Grade: 11-12 1 credit per year

Prerequisite: Child Development

**Course Description:** This course will allow students to explore careers in early childhood and education careers while learning in the classroom lab setting with preschool children. Students are also placed in off-site work experience with children in preschools, day cares, and elementary classrooms during this course. Students will work toward the State Day Care Orientation certification and also be certified in First and CPR.

### **Money Skills**

Course # 268

Grade: 9-12 1 credit per year \*Can count as the 4th math elective for Seniors ONLY\*

Prerequisite: None

**Course Description:** This course is designed to prepare students to understand and use sound financial management skills and practices contributing to financial stability, improving the quality of life for individuals and families. Decision-making, problem-solving, goal setting and using technology are integrated throughout the content.

## **HEALTH AND PHYSICAL EDUCATION**

Note: Weight Training courses are electives and do not satisfy PE requirement for graduation.

Note: Health & PE should be scheduled during the same school year.

### **Health I**

Course # 301

GRADUATION REQUIREMENT

Length of Course: 1 semester

Grades: 9-12 1/2 credit per semester

Prerequisite: None (taken opposite of PE I)

Freshmen are encouraged to select this course.

**Course Description:** This course is designed to give the student skills that promote individual well being, healthy family relationships, and knowledge needed to make responsible choices that affect one's physical, mental and social health. Topics include Responsibility, Human Reproduction and Development, Illness and Disease, Nutrition, Alcohol and Drug Abuse, Physical Fitness, Mental Illness, Stress Management and current issues.

**PE I** (Physical Education)

Course # 307LO

GRADUATION REQUIREMENT

Length of Course: 1 semester

Grades: 9-12 1/2 credit per semester

Prerequisite: None (taken opposite of Health I) Freshmen are encouraged to select this course.

**Course Description:** PE is an individual improvement program with emphasis on carry over values. Instruction in Physical Education I shall not include practice or preparation for interscholastic sports. Arts & Humanities components may also be introduced in this class. Successful completion of Health I and PE I are state requirements for graduation.

**Weight Training I** (football)

Course # 313

Grade: 9 1/2 credit per semester

**Course Description:** This course promotes total physical development for student athletes who plan to participate in team sports with free weights and weight resistance machines. Proper lifting techniques, spotting and safety are stressed throughout this course.

**Weight Training II** (football)

Course # 314

Grade: 10-12 1/2 credit per semester

**Course Description:** This course promotes total physical development for student athletes who plan to participate in team sports with free weights and weight resistance machines. Proper lifting techniques, spotting and safety are stressed throughout this course.

**Weight Training** General

Course # 316

Grade: 9-12 1/2 credit per semester

**Course Description:** This course promotes general physical development for any student who wishes to develop their strength with free weights and weight resistance machines. Proper lifting techniques, spotting, and safety are stressed throughout this course.

**Weight Training** (Baseball/Basketball)

Course # 320

Grade: 9-12 1/2 credit per semester

**Course Description:** This course promotes total physical development for student athletes who plan to participate in team sports with free weights and weight resistance machines. Proper lifting techniques, spotting and safety are stressed throughout this course.

**Weight Training** (Females)

Course # 312

Grade: 9-12

**Course Description:** This course promotes total physical development for female student who wish to develop their strength with free weights and weight resistance machines. Proper lifting techniques, spotting, and safety are stressed throughout this course.

## MATHEMATICS

Beginning with the Class of 2012, all Lone Oak High School students will be required to take four (4) math classes including Algebra I, Algebra II, Geometry and one (1) math elective. This new math requirement will not change the total number of credits needed to graduate, but will increase the number of required courses by one (1) and reduce the number of required free electives by one (1).

The following flow charts show the routes students may follow through the LOHS math curriculum. It is important that students enroll in the appropriate course their freshman year and then progress along the chart toward the senior year. Students **cannot** “back up” to an easier course after successfully completing a more difficult math class. While it is recommended that students complete Geometry prior to Algebra II, it is possible to take those 2 courses simultaneously.

The flow chart below is designed to show how students might progress through the high school curriculum. The math courses on the left are the most basic courses for high school graduation. Moving to the right, the flow chart increases in the level of difficulty and preparation for college level work.

**MATH FLOW CHART**

9 <sup>th</sup> GRADE	10 <sup>th</sup> GRADE	11 <sup>th</sup> GRADE	12 <sup>th</sup> GRADE
Algebra I	Geometry	Algebra II Or Honors Algebra II	CP Math <b>or</b> Alg III <b>or</b> Pre-Calculus <b>or</b> AP Stats <b>or</b> Business Math <b>or</b> Agri Math <b>or</b> Money Skills
Honors Geometry	Honors Algebra II	Pre-Calculus <b>and/or</b> AP Stats	Calculus <b>or</b> AP Calculus <b>and/or</b> AP Stats

**MIDDLE LEVEL**

Algebra I  
Geometry  
Algebra II  
C Prep Math **or** AlgIII  
**or** Pre-Calculus **or**  
Business Math **or**  
Agri Math **or** Money  
Skills

**ADVANCED LEVEL**

Honors Geometry  
Honor Algebra II  
Alg III (11th)/Pre-Calculus(12th)  
AP Cal/AP Stats

**Algebra I/Integrated Math**

Course # 403 and # 404

Grade: 9 - 10

1 math credit per year and 1 elective credit per year

Prerequisites: None

**Course Description:** The fundamental skills of arithmetic and algebra are strengthened through applications and problem solving. This course involves manipulation of algebraic expressions and sentences, solving and graphing linear and quadratic equations, simplifying radical expressions, factoring, and finding solutions to applied problems using these skills. Students enrolled in Algebra I will automatically be enrolled in Integrated Math.

**Geometry**

Course # 419

Grades: 9-11

1 credit per year

Prerequisite: credit in Algebra I

**Course Description:** The purpose of this course is to give the student a good background in geometry. A variety of instructional activities emphasize the concepts and skills involved in such topics as area,

transformations, congruency, similarity, parallel lines, and right triangle relationships. Group activities and numerous diagrams and graphs are used in the course.

### **Honors Geometry**

Course # 420

Grades: 9-10

1 credit per year

Prerequisite: Grade of A or B in Algebra I and/or teacher recommendation

**Course Description:** This course covers the same content and skills as Geometry but in greater depth and at a faster pace. If time permits, this course may include more concepts and skills than the regular course. Individual and group work is stressed. Supplemental materials are widely used with an emphasis on the connection between geometry and other fields of study.

### **Algebra II**

Course # 410

Grades: 10-12

1 credit per year

Prerequisite: Successful completion of Algebra I. Geometry is also recommended. Students choosing to enroll in both Algebra II and Geometry in the same year should have earned a grade of B or higher in Algebra I.

**Course Description:** This course completes the pre-college curriculum in mathematics. In addition to expanding the math concepts of Algebra I, emphasis will be placed on preparation for the study of higher mathematics. Abstract thinking skills, the function concept, and the algebraic solutions to problems from various content areas are stressed. A strong emphasis on graphing makes graphing calculators a necessary tool for this course. The calculator (TI-83 or 84 recommended) costs approximately \$90.

### **Honors Algebra II**

Course # 411

Grades: 10-12

1 credit per year

Prerequisite: Successful completion of Algebra I with a grade of A or B. Geometry with a grade of A or B is also highly recommended

**Course Description:** Same content and skills as Algebra II but there will be more content covered and more advance lessons presented. A graphing calculator is required (TI-83 or 84 recommended).

Note-Students choosing to enroll in both Enriched Algebra II and Geometry in the same year should have earned a grade of A or B in Algebra I.

### **Algebra III**

Course # 414

Grade: 11-12

Prerequisite: Algebra I, Geometry, Algebra II (regular or Honors)

**Course Description:** This course is a bridge to college level classes for those student who wish to continue developing their math skills for Pre-Calculus or college level Algebra and Trigonometry. The course is designed to build the foundation necessary for success in an entry-level college mathematics course. Topics include functions, problem solving, statics, and real-world applications. A graphing calculator is required (TI-83-84) at a cost of approximately \$90.

### **College Prep Math**

Course # 433

Grade: 12

1 credit per year

Prerequisite: Algebra 1, Geometry, Algebra II TEACHER RECOMMENDATION ONLY

Dual Credit with WKCTC (MT65)

**Course Description:** Students must be recommended by a teacher to enroll in this course. The purpose of the course is to help strengthen their algebraic skills. With a successful score on the COMPASS exam, students may avoid placement in non-credit, remedial type courses, saving additional financial expense and time in future college studies. A graphing calculator is recommended (TI-83 or 84) at a cost of approximately \$90.

### **Pre-Calculus**

Course # 422

Grade: 11-12

1 credit per year

Prerequisite: Algebra I, II, and Geometry (regular or enriched) with a C or higher in each course

**Course Description:** This course is designed to prepare students for high school calculus or college algebra. Topics include functions and their inverses, the complex number system, and trigonometry.

Students desiring to be competitive on college entrance exam scores should complete this course. A graphing calculator is required (TI-83 or 84 recommended) at a cost of approximately \$90.

### **Advanced Placement Calculus**

Course# 425

Grades: 11-12                      1 credit per year

Prerequisite: A grade of B or higher in Pre-Calculus; to be done in conjunction with Advance Concepts in Math

**Course Description:** The curriculum established by the College Board is followed as students prepare for the AP Calculus exam. Topics include limits, derivatives, and integration. The course also prepares students to take calculus at the college level. A graphing calculator is required (TI-83 or 84 recommended) at a cost of approximately \$90.

### **Advance Concepts in Math**

Course # 434

Grade: 11-12

Prerequisite: A or B or higher in Pre-Calculus; to be done in conjunction with AP Calculus

**Course Description:** This course is designed to supplement the concepts and techniques used in Pre-Calculus and AP Calculus.

### **AP Statistics**

Course # 432

Grade: 11-12                      1 credit per year

Prerequisite: Algebra II

**Course Description:** The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data, Planning a Study, Anticipating Patterns, and Statistical Inference. To receive college credit, the student must successfully complete the national AP exam given in the spring each year.

## **SCIENCE**

The Science Department recommends that students review the table below and refer to the graduation & diploma requirements in the front of this curriculum guide. Also, please pay attention to the prerequisites for the classes in which you have interest. Remember you need 3 science credits as a minimum graduation requirement. Besides the minimum requirements, students are strongly encouraged to consider taking additional science courses to better prepare themselves for the future. LOHS offers many

challenging upper level sciences such as Physics, AP Physics, AP Chemistry, Anatomy & Physiology, AP Biology, and AP Environmental Science.

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Integrated Science I	Biology Honors Biology	Integrated Science II Chemistry	**Other Advanced Science
Or	Or	Or	Or
Honors Biology	Chemistry	Physics I ** Other Advanced Science	AP Physics **Other Advanced Science

\*\* means these are excellent years to double up on science if the student has an interest in doing so.....

--if you choose Honors Biology as a 9<sup>th</sup> grader.... You must take Physics, Advanced Physics or AP Physics as an 11<sup>th</sup> or 12<sup>th</sup> grader. Please think about Anatomy & Physiology, AP Chemistry, AP Biology, AP Environmental Science and our new Forensic Science class your junior year and senior year as electives!!!! Remember, it is perfectly acceptable to double-up with two sciences in one year....especially after you have your three required science credits for graduation!

### Integrated Science I

Course # 499

Grade 9

1 credit per year

Prerequisites: None (required for all 9<sup>th</sup> grade students unless they were recommended by their 8<sup>th</sup> grade science teacher for Enriched Biology).

**Course Description:** This course explores energy cycles and origins of the earth and the universe including specially selected activities to integrate major concepts.

Lab fee: \$20

### Biology I

Course # 507

Grade: 10

1 credit per year

Prerequisites: Integrated Science

Biology I offers students exploratory experiences and activities in the fundamental concepts of the biological sciences by expanding work done at the elementary and middle school level.

Lab fee: \$20

### Honors Biology

Course # 510

Grade: 9-10

1 credit per year

Prerequisites: Freshmen who made an A or B in 8<sup>th</sup> grade science, were recommended by their 8<sup>th</sup> grade science teachers for Honors Biology, and will be enrolled in Geometry. Sophomores must have completed Integrated Science with an A or B, be recommended by their Int. Science teacher, and completed (or currently enrolled in) Geometry.

**Course Description:** This course is a challenging introduction to high school biology concepts with laboratory investigations and other activities to provide enhancement. It is designed for students that will most likely take multiple upper level sciences such as AP Biology, Anatomy & Physiology, AP Chemistry, Physics, AP Environmental Science and AP Physics. **Freshmen who take Honors Biology must take a Physics class as a junior or a senior!!**

Lab fee: \$20

### Integrated Science II

Course # 504

Grade: 11

1 credit per year

Prerequisite: Integrated Science & Biology I

**Course Description:** This course introduces physical science concepts and activities to provide appropriate background for students needing additional preparation for college prep classes or technical school.

Lab fee: \$20

### **Chemistry I**

Course # 517

Grade: 10-12 1 credit per year

Prerequisite: Geometry **and** Integrated Science and/or Biology I (Honors Biology)

**Course Description:** Chemistry I is a challenging course involving the application of chemical concepts in a variety of problem solving and laboratory situations.

Lab fee: \$20

### **Physics I**

Course # 526

Grade: 11-12 1 credit per year

Prerequisite: Chemistry I or Integrated Science II, and Algebra II

**Course Description:** This course is intended for students who will not be majoring in physics, chemistry or engineering. A study of some of the major concepts and laws of classical and modern physics, historical context, provides the student with a foundation for understanding, at a conceptual level, the natural phenomena and technological devices encountered in everyday experience. Topics will include a study of motion and Newton's laws, momentum and energy, the structure of matter, thermodynamics, relativity, wave motion, electromagnetism, light, and the quantum nature of the atomic and subatomic world.

### **AP Physics B**

Course # 527

Grade: 12 1 credit per year

Prerequisite: Physics, and have taken or be enrolled in Pre-Calculus

**Course Description:** This course follows the curriculum established by the College Board in preparation for the AP exam. In AP Physics students will be provided a systematic introduction to the main principles of physics and emphasis on the development of conceptual understanding and problem-solving ability using algebra and trigonometry, but rarely calculus. In most colleges, this is a one-year terminal course including a laboratory component and is not the usual preparation for more advanced physics and engineering courses. However, the B course provides a foundation in physics for students in the life sciences, pre-medicine, and some applied sciences, as well as other fields not directly related to science. *A course designed for students planning to major in science and engineering.*

Lab fee: \$20

### **Anatomy and Physiology**

Course # 531

Grade: 11-12 1 credit per year

Prerequisite: Biology I (or Honors Biology) and Chemistry. Int. Science II can be substituted for the Chemistry prerequisite if the student made an A or B and has the recommendation of that teacher.

**Course Description:** This course expands the understanding of the structure and function of the human body and systems as relevant to medical career preparation.

Lab fee: \$20

### **AP Biology**

Course # 514

Grade: 11-12 1 credit per year

Prerequisite: Biology I (or Honors Biology) and Chemistry. Int. Science II can be substituted for the Chemistry prerequisite if the student made an A or B and has the recommendation of that teacher.

**Course Description:** This course follows the curriculum established by the College Board in preparation for the AP exam, which is encouraged to be taken in order for the student to receive college credit at the college level.

Lab fee: \$20

### **AP Chemistry**

Course # 522

Grade: 11-12 1 credit per year

Prerequisite: Chemistry I

**Course Description:** This course follows the curriculum established by the College Board in preparation for the AP exam. Topics include: stoichiometry, acid-base equilibrium, kinetics,

Lab fee: \$20

### **Inorganic Chemistry**

Course # 519

Grade: 11-12

Prerequisite: Chemistry I, to be taken in conjunction with AP Chemistry

**Course Description:** This course is designed to supplement the concepts and techniques used in Chemistry I and AP Chemistry.

### **AP Environmental Science**

Course # 540

Grade: 11-12

1 credit per year

Prerequisite: Chemistry I and currently taking (or have taken) Pre-Calculus

**Course Description:** This course follows the curriculum established by the College Board in preparation for the AP exam. Global and local ecological issues are becoming more of a concern in today's society; this course will address the science that may lead to many good career possibilities and college majors.

Lab fee: \$20

### **Introduction to Forensic Science**

Course # 541

Grade 11-12

1 credit per year

Prerequisites: Biology, Chemistry and Parental Permission

**Course Description:** This course is designed to give students an overview of various topics within the forensic science field. It is not intended to be a thorough study, but rather one that briefly studies several areas of this field so that students may develop a working knowledge of forensic science. The course will incorporate concepts from biology, chemistry, Physics, History, Writing (technical and creative) and Psychology. It will also include extensive lab work, research, guest speakers and field trips. Because of the sensitive nature of some of the topics, this course will may not be suited for every student and will require parental permission upon entrance into the course. Areas of study will include: History of Forensics, Gross Anatomy, Ballistics, Trace Evidence, and Serology, fingerprinting, DNA Fingerprinting, Criminal Profiling and toxicology. **All students must have an overall "C" average in the required**

**Chemistry and Biology classes.**

Lab fee: \$20

## **SOCIAL STUDIES**

### **Economics/Government**

Course # 611

GRADUATION REQUIREMENT

Grade: 9

1 credit per year

**Prerequisite:** Required course for 9<sup>th</sup> grade

**Course Description:** This course will explore the development of and differences in various governmental and economic systems as well as a variety of economic systems, their benefits and weaknesses and apply economic principles to world, national and consumer applications. Factors

involving production, regulation of business, influence of taxes, credit and budgeting will be included. Primary emphasis will be on the United States governmental and economic structure using a comparative approach. In The Government portion, students will investigate the forces that led to the creation of a representative democracy, the Constitution, amendments and growth of government in the United States.

### **AP Government**

Course # 610

Grade 11-12 1 credit per year

**Prerequisite:** B average in Social Studies classes and high academic standing is recommended.

**Course Description:** AP Government is a detailed study to give students a critical perspective of American government and politics in the United States. This course serves as an introduction to the US national government and requires students to become aware of the groups that govern and an analysis of governing styles with the objective to demonstrate how our government institutions and political processes result in some policies being adopted while others are not adopted. This course follows the curriculum established by the College Board in preparation for the AP exam.

### **Psychology**

Course # 617

Grade: 10-12 1 credit per year

**Course Description:** Psychology is the systematic study of both the cognitive aspects of the mind and how humans feel about their experiences. How individuals perceive, learn, react, and relate to each other and to themselves are major aspects of psychology. Psychology has demonstrated the importance of attitudes, feelings, and values in determining human behavior. Students will be expected to do ten hours of community service.

### **History of Sports**

Course # 619

Grade: 10-12 1 credit per year

**Course Description:** This course chronicles the impact of sports on history. Issues such as civil rights movements, sports during times of war, the cold war, and the spreading of democracy will be examined through athletics. Students will focus on the impact of sports on society, the political and cultural progression of the United States.

### **Military History**

Course # 620

Grade: 11-12 1 credit per year

This survey course will examine history primarily from a military perspective. The course will analyze major military topics throughout world history with an emphasis on the 20th century wars that have shaped the modern world. Furthermore, the course will look at the leaders, strategists and soldiers who waged these wars. The course will also examine the evolution of technology and its impact on warfare.

### **World Civilization/Geography**

Course # 615

GRADUATION REQUIREMENT

Grade: 10 1 credit per year

**Prerequisite:** Recommended to be taken the sophomore year

**Course Description:** World Civilization provides historical perspective on major world events and movements from the Renaissance through the present. The main focus is on the diverse political, religious, economic, and social systems that have developed throughout the world.

### **AP World History/Geography**

Course # 616

May be taken in place of # 615 World Civ/Geography

Grade: 10-12 1 credit per year Summer Reading Required

**Prerequisite:** B average in social studies classes and high academic standing is recommended.

**Course Description:** AP World History/Geography is a college level class that is solely designed to allow students to pass the AP World History exam at the end of the year. It is an intensive investigation of the history of the world since the year 1000 AD. This course requires nightly preparation on the part of the student and students not planning to take the AP exam or not seriously interested in history should take LOHS #615, World Civ/Geog. AP World History follows the curriculum established by the College Board.

## **U. S. History**

Course # 603

### **GRADUATION REQUIREMENT**

Grade: 11

1 credit per year

Prerequisite: None, this course is recommended to be taken the junior year.

**Course Description:** U.S. History is a chronological study of events in America. The main focus will be on the years 1865 to the present although there will be a review of events from the colonial period through the Civil War. Political and economic development will be examined as well as the impact of diverse cultures on American society.

## **AP U.S. History**

Course # 606

May be taken in place of #603 U.S. History

Grade: 11-12

1 credit per year

Summer Reading Required

**Prerequisite:** B average in social studies classes and high academic standing is recommended.

**Course Description:** AP US History is a college level class that is solely designed to allow students to pass the AP US History exam at the end of the year. It is an intensive investigation of the history of the United States from exploration and settlement to the present. This course requires nightly preparation on the part of the student with significant reading and writing assignments. Students not planning to take the AP exam or not seriously interested in history should take LOHS #603, United States History. AP US History follows the curriculum established by the College Board.

## **AP European History**

Course # 623

Grade 11-12

1 credit per year

Summer Reading Required

**Prerequisite:** B average in social studies classes and high academic standing is recommended.

**Course Description:** AP European History is a college level class that is solely designed to allow students to pass the AP European History exam at the end of the year. It is an intensive investigation of the history of Europe since the Renaissance. This course requires nightly preparation on the part of the student and students not planning to take the AP exam or not seriously interested in history should not take this course. AP European History follows the curriculum established by the College Board.

## **AP Psychology**

Course # 625

Grade: 11-12

1 credit per year

**Prerequisite:** B average in Psychology (#617), AP teacher recommendation and high academic standing is recommended.

**Course Description:** This course will introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice.

## **TECHNOLOGY EDUCATION**

### **Overview of Technological Systems I**

Course # 880

Grade: 9-12

1 credit per year

Prerequisite: None

**Course Description:** This course is a general introduction to technology. Students will learn what technology is and how it relates to other content areas. Students will learn how technology was developed, the major types of technology, its resources and methods and many of its key principles. Students will explore careers. Students will have experiences in problem solving and making sound decisions. The student will explore areas of communications, manufacturing, construction, transportation

and bio-related technologies. Students will be assigned problem-solving projects that will relate to the technology areas.

### **Overview of Technological Systems II**

Course # 883

Grade:10-12

1 credit per year

Prerequisites: Overview of Technological Systems I

**Course Description:** This course is a continuation of Overview of Technological Systems I. In the course the student will be involved with a more intense study of Technology. Study of the Technology areas will involve projects and research.

### **Computer Assisted Design Technology**

Course # 806

Grade: 9-12

1 credit per year

Prerequisite: None

**Course Description:** This class is geared to the student that is interested in mechanical and architectural drawing. The class is very helpful to the student that has interests in careers of engineering and or architecture. Students will use basic fundamentals from geometry and math to solve drafting problems. Generic-Cad is the program that is used in this class. This unit will cover basic elements of drawing windows and keyboard and mouse use. Measurement scales, coordinate systems, units of measurements, screen display options will be covered along with drawing entities such as lines, circles, arcs.

### **Multimedia Class**

Course # 160

Grade: 10-12

1 credit per year

Prerequisite: Word Processing

**Course Description:** This class offers students a hands-on experience with state-of-the-art technology to produce multimedia projects and web pages. Students will participate in a variety of activities from web casts of sporting events to the design of various school publications.

### **Web Design**

Course # 928

Grade: 11-12

1 credit per year

Prerequisite: B average and Teacher Approval

**Course Description:** This course is designed to teach students how to create, edit, publish, manage, and administer a website. This course will use MacBooks, iWeb, iWorks, iLife, and additional software to design, create, and publish the Lone Oak High School website. In addition, students will use creative writing, reporting, photography, video and photo editing, and digital graphic design to enhance their abilities and the website. It is highly recommended that students wishing to take this course are dedicated to: making the website the best it can be, conducting themselves properly as members of a design team, learning and improving digital skills, and troubleshooting problems in a positive, solution based environment. **Acceptance into the class is by application and teacher approval only.**

### **Help Desk**

Course # 112

Grade: 10-12

1 credit per year

Prerequisite: None

**Course Description:** This class is designed to introduce the student to the concepts of networking, computer support services, advanced web design, and career exploration while organizing a student-run Technology Help Desk. **Acceptance into the class is by application and teacher approval only.**

### **AP Computer Science A**

Course # 477

Grade: 10-12

1 credit per year

Prerequisite: Word Processing and Overview of Technology I

**Course Description:** This class emphasizes object-oriented programming methodology with an emphasis on problem solving and algorithm development. It is meant to be the equivalent of a first-semester course in computer science. It also includes the study of data structures and abstraction.

### **Miscellaneous Courses**

#### **Library Aide**

Course # 1000

Grade: 12 0 Credit per year

**Prerequisite:** 2.5 GPA and prior approval by teacher, counselor, or principal

#### **Office Aide**

Course # 1003

Grade: 12 0 Credit per year

**Prerequisite:** 2.5 GPA and prior approval by teacher, counselor, or principal

**Teacher's Aide**

Course # 1006

Grade: 12

0 Credit per year

**Prerequisite:** 2.5 GPA and prior approval by teacher, counselor, or principal**Guidance Aide**

Course # 1009

Grade: 12

0 Credit per year

**Prerequisite:** 2.5 GPA and prior approval by teacher, counselor, or principal**Educational Co-op**

Course # 1016

Grade: 12

0 Credit per year

**Prerequisite:** 3.0 GPA and prior approval by counselor, or principal**Course Description:** Students must be admitted into WKCTC and abide by their scheduling rules. The courses taken DO NOT count toward graduation requirements for LOHS.**Peer Tutoring**

Course # 1012

Grade 11-12

1 Credit per year

**\*APPLICATION REQUIRED****Prerequisite:** Prior approval by teacher, counselor, or principal.**Course Description:** This course is for juniors and seniors interested in pursuing a career in special education. Students will assist special education teachers with the delivery of instruction and will research various special education disabilities as identified by Federal Regulations. **Acceptance into the class is by application and teacher approval only.****Cross-Age Tutoring**

Course # 1015

Grade 11-12

1 Credit per year

**\*APPLICATION REQUIRED****Prerequisite:** Prior approval by teacher, counselor or principal and approval of parents to drive to elementary school if needed.**Course Description:** This course is for students who are interested in helping young students succeed in learning. Students will go to elementary schools to work with students in small learning groups. This course will be of value to students who desire a career in education or any occupation where the ability to effectively communicate with others is important. **Acceptance into the class is by application and teacher approval only.****Study Skills**

Course # 1019

Grade 9-12

1 credit per year

**Prerequisite:** Teacher recommendation only**Course Description:** This course is an intensive class targeting students who need to develop study and thinking skills. The student will be introduced to techniques to improve organization, note-taking, critical thinking skills, critical reading, and writing.**Introduction to Teaching**

Course # 1017 (This is the course number you will need to use for registration.)

Grade 12

2 Credits per year

**Prerequisite:** Prior approval by teacher, counselor or principal, 2.5 GPA and 18 ACT**Course Description:** The Murray State University Teacher Quality Institute provides an opportunity for high school students to enroll in courses that will encourage interested seniors to explore a career in teaching. High school and university credit may be earned. High school seniors taking these courses will have the cost of tuition and books provided through an agreement with the Teacher Quality Institute.**EDU 103: Issues and Practices of American Education (MSU 1st Semester)****ED 201: An Introduction to American Education (WKCTC/MCTC 1st Semester)**

Grade Level: 12

Prerequisites: None  
Credit: High School 1 Credit per semester or  
Hours: MSU or KCTCS 3

**EDU 104:** Exploration of Teaching  
(MSU 2<sup>nd</sup> Semester)

Grade Level: 12

Credit: HS 1 Credit per semester

**Prerequisites:** Successful completion of EDU 103: *Issues and Practices of*  
American Education or ED 201: An Introduction to American Education,  
and the recommendation of EDU 103 or ED 201 Instructor

Hours: MSU 3

## **KY TECH-PADUCAH AREA TECHNOLOGY CENTER**

*For students in 11<sup>th</sup> or 12<sup>th</sup> grades*

Two block, two credit morning classes available for juniors and seniors, 7:35-10:50 or 11:25-2:251,  
allowing for 4 classes and 4 credits at LOHS.

## **KENTUCKY TECH—PADUCAH**

Kentucky Tech - Paducah is located at 2400 Adams Street, Paducah, , and is one of the 54 KY Tech Area Tech Centers located across the state in the Office of Career and Technical Education. The primary purpose of the ATC is to provide technical training to secondary students from surrounding area High Schools.

All courses at KY Tech--Paducah are KENTUCKY TECH courses and most will lead toward certification and all provide marketable entry-level skills in the program's area of study. The high school courses listed below often include multiple KY Tech courses. The individual KY Tech courses are listed under the generic name of the high school course. College credit for most of these KY Tech courses can be obtained at no cost to students through West Kentucky Community and Technical College and other colleges and universities.

### **AUTO BODY REPAIR (LOHS Course #900)**

#### **INTRO AUTOBODY REPAIR - ABR 100**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** This course introduces the student to safety, sanding, grinding, pulling, roughing and filling; the use of tools and equipment; and preparing and priming automotive panels through lectures, hands-on demonstrations and practice.

#### **NON-STRUCTURAL ANALYSIS & REPAIR - ABR 130**

**Suggested Grade Level: 11-12**

**Prerequisite: Intro to Auto Body Repair 100**

**Credit: 3**

**Course Description:** This course gives instruction and provides practical experience in replacing and aligning bolts on automotive parts such as doors, hoods, and fenders; as well as instruction on the repair and replacement of non-structural weld-on automotive panels by aligning, welding, cutting, and drilling through demonstrations and lectures. It will be taught by demonstration and hands-on practice.

#### **PAINTING & REFINISHING - ABR-150**

**Suggested Grade Level: 11-12**

**Prerequisite: Intro to Auto Body Repair 100**

**Credit: 3**

**Course Description:** This course provides instruction in the use of lacquer, acrylic enamel and base coat/clear coat refinishing products, masking procedures, preparations and paint problems. It will be taught by demonstration and lecture. The skills required are most effectively taught and practiced on live work. Due to the unpredictable nature of live work, some tasks may carry over to other courses.

#### **PRACTICUM I - ABR198**

**Prerequisite: Intro to Auto Body repair 100**

**Non- structural Repair & Lab 130-131 or**

**Painting and Refinishing & Lab150-151**

**Grade Level: 12**

**Course Description:** The practicum provides supervised on-the-job work experience related to the students' education objectives. Students participating in the practicum do not receive compensation.

#### **COOPERATIVE EDUCATION I - ABR 199**

**Prerequisite: Intro to Auto Body repair 100**

**Non- structural Repair & Lab 130-131 or**

**Painting and Refinishing & Lab150-151**

**Grade Level: 12**

**Course Description:** Cooperative Education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Cooperative Education program receive compensation for their work.

### **AUTO TECHNOLOGY (LOHS Course #903)**

#### **BASIC AUTOMOTIVE ELECTRICITY – ADX 120 & LAB ADX121**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 2**

**Course Description:** This course introduces the student to the principles, theories, and concepts of the automotive electrical system that include the unique diagramming, coding and locating of wiring, and component devices. This course is a hands-on class designed to allow the student to use the concepts, principles, and theories covered in Basic Automotive Electricity ADX 120 in practical application.

### **BRAKE SYSTEMS - AUT 110 & LAB AUT 111**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 2**

**Course Description:** This course involves the operational theory and application of hydraulic and anti-lock brake systems; disc and drum brakes are discussed. This course develops skills in the diagnosis and repair of hydraulic and anti-lock brake systems, covering both disc and drum type braking systems.

### **EMISSION SYSTEMS - AUT 142**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** This course presents the theory, component identification, application, operation, and the service and repair of advanced automotive ignition, fuel, and emission systems, including related components.

### **COMPUTER CONTROL SYSTEM & DIAGNOSIS - AUT 240**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** This course presents the comprehensive diagnostics of onboard computer control systems, including distributor less ignition systems. The problem solving process, including flow chart reading, will be presented.

### **ENGINE REPAIR ADX- 150 & LAB ADX 151**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 2**

**Course Description:** This course provides a series of lectures and demonstrations on the fundamentals of engine repair, troubleshooting, and engine operation and maintenance. This course provides practical experiences and applications relating to engine repair, inspections, troubleshooting and maintenance. Co-op provides supervised on-the-job work experience related to the student's educational objectives. Students who participate in the Cooperative Education program receive compensation for their work.

### **COOPERATIVE EDUCATION I - AUT 299**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** Co-op provides supervised on-the-job work experience related to the student's educational objectives. Students who participate in the Cooperative Education program receive compensation for their work.

### **CARPENTRY (LOHS Course #906)**

All Carpentry courses will lead toward NCCER\* certification and provide marketable entry-level skills in the program's area of study.

\*NCCER maintains a National Registry in order to provide students and craft professionals with industry-recognized credentials and assure national portability of skills. These credentials benefit students as they seek employment and build their careers.

### **INTRO TO CONSTRUCTION CARPENTRY – CARP 126 & CAR 127 LAB**

**Suggested Grade Level: 9-12**

**Prerequisite: None**

**Credit: 2**

**Course Description:** This course provides an overview of the building materials used in construction work, including lumber, sheet materials, engineered wood products, structural concrete, and structural steel. Also describes the various fasteners and adhesives used in construction work. Provide detailed description of the hand tools and portable power tools used by carpenters. Emphasis is on safe and proper operation of tools, as well as care and maintenance. Safety in the lab and on the job site is stressed.

Review the history of the trade, describe the apprentice program, identify career opportunities for carpentry and construction workers, and list the responsibilities, and characteristics a worker should possess.

### **FLOOR & WALL FRAMING CAR 190 & CAR 191 LAB**

**Suggested Grade Level: 9-12**

**Prerequisite: CARP 126 & CAR 127**

**Credit:2**

**Course Description:** The student will practice floor framing, layout, and construction of floor frames. Covers framing basics as well as the procedures for lay out and constructing a wood floor using common lumber as well as engineered building materials. Describes the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, constructing corners and partition Ts, bracing walls and ceilings, and applying sheathing

### **CEILING & ROOF FRAMING CAR 196 & CAR 197 LAB**

**Suggested Grade Level: 9-12**

**Prerequisite: CARP 126 & CAR 127**

**Credit: 2**

**Course Description:** This course the various kinds of roofs and contains instructions for laying out rafters for gable roofs, hip roofs, and valley intersections, overage includes both stick-built and truss-built roofs. The emphasis of this course is on layout, cutting and installing ceiling joists, rafters, roof decking, and roof coverings.

### **Exterior and Interior Finish and Lab CAR 200 & CAR 201 LAB**

**Suggested Grade Level: 9-12**

**Prerequisite: CARP 126 & CAR 127**

**Credit: 2**

**Course Description:** This course covers roof types and combinations of types used in the construction industry. The emphasis is on layout, cutting, and installing ceiling joists, rafters, roof decking, and roof coverings. The course also presents the basic concepts of interior trim, including base, ceiling, and wall moldings and window and door installation and casing. Installation of insulation, gypsum, paneling and flooring will also be included. In addition students will perfect their skills associated with exterior finishing including the installation of vinyl siding.

### **ISX 100 INDUSTRIAL SAFETY**

**Suggested Grade Level: 9 -12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** This course provides practical training in industrial safety. The students are taught to observe general safety rules and regulations, to apply work site and shop safety rules, and to apply OSHA regulations. Students are expected to obtain certification in first aid and cardiopulmonary resuscitation.

### **CAR 100 COOPERATIVE EDUCATION I**

**Suggested Grade Level: 11-12**

**Prerequisite:** Permission of Instructor

**Credit:** 1

**Course Description:** Cooperative Education provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Cooperative Education program receive compensation for their work

### **COSMETOLOGY (LOHS Course #912)**

**COSMETOLOGY I – COS 114**

**Suggested Grade Level:** 11-12

**Prerequisite:** None

**Credit:** 2

**Class begins at 7:30am**

**Course Description:** This course is designed to cultivate proper attitude and behavior patterns needed to create a successful cosmetologist. Kentucky Statutes and Regulations, safety, microbiology, sanitation, infection control, first aid treatment, structure, and disorders of the nail are studied. Basic fundamentals of hair, skin and nail care, hair styling and shaping, manicures and pedicures, chemical and thermal services, and wigs are introduced. The student, in developing manipulative skills and practicing procedures, utilizes mannequins and classmates. After 300 hours, students begin to apply procedures on clients under the direct supervision of the instructor.

**COSMETOLOGY II – COS 116**

**Suggested Grade Level:** 11-12

**Prerequisite:** None

**Credit:** 2

**Class begins at 7:30am**

**Course Description:** A study of basic chemistry emphasizes the physical and chemical properties of cosmetic materials. Electricity and light therapy are discussed and an in-depth study of anatomical structures affected by cosmetology services including disorders of the skin, scalp, and hair. The instructor gives the students progressively more difficult assignments with close supervision.

### **NAIL TECHNOLOGY (LOHS Course #930)**

\*\*\*This course must be taken for two years in order to be eligible to become certified\*\*\*

**Basic Nail Technology – COS 150**

**Suggested Grade Level:** 11-12

**Prerequisite:** None

**Credit:** 2

**Class begins at 11:30am**

**Course Description:** This course provides knowledge of the art and science of nail technology including the rules and regulations of the State Board of Cosmetology as they apply to the salon/school environment. Students practice on classmates and progress to work on clients.

**Applied Nail Technology – COS 152**

**Suggested Grade Level:** 11-12

**Prerequisite:** None

**Credit:** 2

**Class begins at 11:30am**

**Course Description:** A continuation of nail technology is studied. A comprehensive written and practical exam will be given in preparation for State Board Licensure. Students are expected to exhibit a high performance level.

**ADDENDUM (all courses):**

*\*Student must be no less than 16 years of age and have successfully completed both 9<sup>th</sup> and 10<sup>th</sup> grades.*

*\*Student must sign up for no less than 2 consecutive hours, preferably 3, or 2 blocks.*

*\*Student (Graves Co.) must be able to drive or ride to the Tech school as class starts at 7:30am.*

*\*A notarized transcript must be brought to class upon enrollment (school seal cannot be accepted).*

*\*Black scrubs, socks and work-type shoes or tennis shoes are required. Lab jacket and name tag will be provided.*

## **ENGINEERING, DRAFTING AND DESIGN (Formerly Computer Aided Drafting--CAD)**

**(LOHS Course # )**

**DRAFTING FUNDAMENTALS - DFT 102**

**Suggested Grade Level: 9 -12**

**Prerequisite: None**

**Credit: 2**

**Course Description:** Drafting Fundamentals explores drafting and its processes: use and maintain equipment and supplies; determine line weights; measure and read line lengths with drafting scales; measure angles; and draw lines, circles, arcs, and irregular curves. Continue applying knowledge of freehand and mechanical lettering, geometric construction, freehand sketching, and beginning orthographic projection. Characteristics of lines and planes in orthographic projection and the principles applied to show the size and shapes of projects. Dimensioning techniques for orthographic drawings.

**COMPUTER AIDED DRAFTING I- DFT 122**

**Suggested Grade Level: 10 -12**

**Prerequisite: FUNDAMENTALS OF DRAFTING - DFT 102**

**Credit: 2**

**Course Description:** Introduction to Computer Aided Drafting uses computer graphic workstations in the application of fundamental principles and capabilities of CAD, basic drafting conventions, and operations. An in-depth study of computer aided drafting commands, terminology, command utilization, and skill development.

**ENGINEERING GRAPHICS - DFT 112**

**Suggested Grade Level: 11 -12**

**Prerequisite: FUNDAMENTALS OF DRAFTING - DFT 102 & COMPUTER AIDED DRAFTING 1 - DFT 122**

**Credit: 2**

**Course Description:** Engineering Graphics includes exploration of lines and planes as they relate to orthographic projection to show the size and shape of objects. Engineering Graphics also includes application of principles and graphic elements of sectioning to show interior detail; the techniques involved in creating oblique projections, axonometric projections, and perspective drawings; and the dimensioning techniques and symbol usage common to all drafting disciplines.

**INTRODUCTION TO ARCHITECTURE - ADFT 130**

**Suggested Grade Level: 9 -12**

**Prerequisite: FUNDAMENTALS OF DRAFTING - DFT 102**

**Credit: 2**

**Course Description:** This lecture/lab course provides a practical approach to architectural drafting. This course is an introduction to board and computer aided drafting as it relates to residential and commercial architecture, specifications, and structural systems including wood, masonry, concrete, and steel.

## **GIS- GEOGRAPHICAL INFORMATION SYSTEMS—(Part of the CAD Program)**

**(LOHS Course # 805)**

**Introduction to Geographical Information Systems (GIS) -- IT 160**

**Suggested Grade Level: 9 -12**

**Prerequisite: NONE**

**Credit: 1**

**Course Description:** This course is an introduction to GIS. The GIS course is designed to help students learn about the world around them and how to see the world in multilayered, three-dimensional maps. This course will also help students with geography, using GPS systems and map reading (each student will be assigned a portable electronic GPS unit).

**GIS Software Tools - IT 260**

**Suggested Grade Level: 10 -12**

**Prerequisite: NONE**

**Credit: 1**

**Course Description:** GIS extensions are software modules that plug into the core product to deliver powerful added functionality. This class introduces some of the most popular advanced extensions used for network analysis, spatial analysis, and 3D Analysis.

### **Advanced Geographical Information Systems (GIS) -- IT 268**

**Suggested Grade Level: 10-12**

**Prerequisite:** Introduction to Geographical Information Systems (GIS) -- IT 160

**Credit: 1**

**Course Description:** This course continues learning how to create maps and includes several project based assignments

### **HEALTH SCIENCE (LOHS Course #915)**

#### **PRINCIPLES OF HEALTH SCIENCES – HEA 102**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** This course is an orientation to the health care careers. It is also designed to develop and enhance an understanding of the roles and responsibilities of each career major area. Communication, study, and leadership skills will be emphasized as the student learns about the health care industry, health care economics, and career opportunities available. Medical Terminology will be integrated throughout the course.

### **EMERGENCY PROCEDURES**

**INCLUDES BOTH: CPR 100/KHP 190**

**SUGGESTED GRADE LEVEL 10-12**

**CREDIT ½**

**PREREQUISITE – NONE**

CPR FOR HEALTHCARE PROFESSIONALS - CPR 100

**Course Description:** Emergency Procedures is designed to teach cardiopulmonary resuscitation (Adult/Infant/Child) using current emergency techniques relative to cardiac and/or respiratory arrest, as put forth by the American Heart Association, National Safety Council or American Red Cross. The American Heart Association, National Safety Council or American Red Cross standardized course qualifies a student for certification of cardiopulmonary resuscitation and safety and first aid

### **SAFETY AND FIRST AID - KHP 100**

**Course Description:** Safety and First Aid is a course designed to teach current strategies relative to designated emergency situations as put forth by the National Safety Council or American Red Cross. The National Safety Council or American Red Cross standardized course qualifies a student for certification in safety and first aid.

### **ANATOMY & PHYSIOLOGY - HEA 110**

**SUGGESTED GRADE LEVEL 11-12**

**PREREQUISITES –NONE**

**CREDIT 1**

**Course Description:** Basic Anatomy and Physiology is designed to provide knowledge of the structure and function of the human body with an emphasis on normalcy. The course includes interaction of all body systems in maintaining homeostasis and promotes an understanding of the basic human needs necessary for health maintenance. Explain the basic principles of inorganic and organic chemistry as they apply to physiological processes.

### **MEDICAID NURSE AIDE - MNA 100**

**SUGGESTED GRADE LEVEL 11-12**

**PREREQUISITES: GPA OF 2.5****CREDIT 1**

**Course Description:** Specific knowledge and skills for students and/or nurse aides to assume the role and responsibility required in long-term care is communicated to the student through lectures, lab, and clinical practice. The focus of the course is communication, infection control, safety, residents' rights, and basic nursing skills.

**MEDICAL TERMINOLOGY - AHS 120****SUGGESTED GRADE LEVEL 10-12****PREREQUISITES – NONE****CREDIT 1/2**

**Course Description:** An overview designed of the basic techniques of medical word building is provided. Once these techniques have been developed, they can readily be applied to acquire an extensive medical vocabulary. Emphasis is on basic anatomical, physiological, pathology, diagnostic procedures, and pharmacological terms.

**INFORMATION TECHNOLOGY (LOHS Course #921)****COMPUTER MAINTENANCE ESSENTIALS – IT 105**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** Computer Maintenance Essentials introduces basic computer hardware and operating systems, covering installing, building, upgrading, repairing, configuring, troubleshooting, optimizing, diagnosing and preventive maintenance, with additional elements of soft skills and security. Course objectives map closely to the CompTIA A+ Essentials National Examination that validates the basic skills needed by any entry-level computer service technician (first nine weeks).

**This class is only taught in the afternoon.**

**ADVANCED COMPUTER MAINTENANCE– IT 205**

**Suggested Grade Level: 10-12**

**Prerequisite: IT 205**

**Credit: 1**

**Course Description:** Introduces advanced computer maintenance tasks including installation, building, repairing, configuration, trouble shooting, optimizing, diagnosing and preventive maintenance in the context of the field service or enterprise environment. This course is appropriate for those who work or plan to work, as computer technicians in a mobile or corporate environment. This course maps closely to the CompTIA A+ 220-602 National Examination (second nine weeks)

**This class is only taught in the afternoon.**

**Web Site Design– IT 130**

**Suggested Grade Level: 10-12**

**Prerequisite: NONE**

**Credit: 1**

**Course Description:** Web site design focuses on the overall Web site production process involving layout, navigation, and interactivity, with particular emphasis on design. It will expose the student to the operation of digital video camera, scanners, and sound equipment. The design, layout, and composition of images, animation, and video suitable for Web site production are stressed. (Spring semester, third nine weeks)

**This class is only taught in the afternoon.**

**Web Page Development– IT 132**

**Suggested Grade Level: 10-12**

**Prerequisite: NONE**

**Credit: 1**

**Course Description:** Web Page Design using HTML will be introduced. Creating web documents using a simple text editor will be the main focus. How to use a simple web editor will also be covered.

Features such as layout, tables, images, forms, frames and the incorporation of sound and video will be explored. Developing site specifications and methods to increase the appeal and effectiveness of web sites are included. How to prepare web documents appropriate for use in business and professional web sites will be covered. (Spring semester, fourth nine weeks)

**This class is only taught in the afternoon.**

**CISCO NETWORKING I – IT 120****Suggested Grade Level: 10-12****Prerequisite: None****Credit: 2**

**Course Description:** Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Provides students the opportunity to build simple LAN topologies by applying basic principles of cabling, performing basic configurations of network devices, including routers and switches, and implementing IP addressing schemes. (FIRST SEMESTER ONLY) **This class is only taught in the morning.**

**CISCO NETWORKING II – IT 122****Suggested Grade Level: 10-12****Prerequisite: IT 120****Credit: 2**

**Course Description:** Describes the architecture, components, and operations of routers, and explains the principles of routing and routing protocols. Provides students with the opportunity to analyze, configure, verify and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. Includes how to recognize and correct common routing issues and problems. (SECOND SEMESTER ONLY) **This class is only taught in the morning.**

**CISCO NETWORKING III – IT 220****Suggested Grade Level: 10-12****Prerequisite: IT 122****Credit: 2**

**Course Description:** Covers the technologies and protocols needed to design and implement a converged switched network. Teaches the hierarchical network design model and how to select devices for each layer, switch configuration for basic functionality, implement Virtual LANs, VTP, and later-VLAN routing in a converged network and the various implementations of Spanning Tree Protocol in a converged network. (FIRST SEMESTER ONLY)

**This class is only taught in the morning.**

**CISCO NETWORKING IV – IT 222****Suggested Grade Level: 10-12****Prerequisite: IT 220****Credit: 2**

**Course Description:** Discusses the WAN technologies and network services required by converged applications in Enterprise Networks. Covers implementation and configuration of common data link protocols and application of WAN security concepts, principles of traffic, access control and addressing services. Teaches how to detect, troubleshoot, and correct common enterprise network implementation issues. (SECOND SEMESTER ONLY)

**This class is only taught in the morning**

**RADIO & TELEVISION TECHNOLOGY & PRODUCTION (LOHS Course #924)****VIDEO EDITING – RTV 100****Suggested Grade Level: 10-12****Prerequisite: None****Credit: 1**

**Course Description:** This course introduces non-linear and advanced editing techniques also identify the differences between, linear and nonlinear editing. Equipment will include stand alone edit system and PC based edit software.

**STUDIO DIRECTING – RTV 110****Suggested Grade Level: 10-12****Prerequisite: None****Credit: 1**

**Course Description:** Students will demonstrate knowledge of how to translate a TV script into effective commands, proper script marking techniques, video and audio transitions and their proper use. This course provides knowledge of proper voice commands and timing in video production. The ability to operate control room production switcher, as technical director and execute direct commands in a timely manner.

**CAMERA OPERATION – RTV 120**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** The introduction to camera vocabulary and begins with identifying, operation of the many different parts of the camera, tripod or dolly. How to operate the different functions, features of the camera such as focus, zoom, lighting, movement and cues.

**SOUND PRODUCTION – RTV 150**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** The introduction of Sound vocabulary, identifying the different sound peripherals such as microphones, equalization, connectors, effects, levels and placement of microphones. This course presents the operation of the audio console, playback and recording equipment and PC software.

**BROADCAST TECHNICIAN – RTV 200**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** The broadcast technician begins with identifying cables and connectors, hooking up equipment such as DVD players, computers, monitors, setting up cameras, RCU, audio and editor. The history of broadcasting will be presented along with modern technology.

**PERFORMANCE AND SCRIPTING – RTV 210**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** Performance and scripting demonstrates knowledge of how to script a show using simple storyboard format using proper wording with directions given in script. Demonstrate knowledge of timing, continuity, and aesthetic value, along with news gathering and interviewing techniques. Makeup and clothing guidelines for television will be introduced with on-camera interviewing and news writing/casting.

**FUNDAMENTALS OF BROADCASTING – RTV 220**

**Suggested Grade Level: 10-12**

**Prerequisite: None**

**Credit: 1**

**Course Description:** Fundamentals of broadcasting creates an understanding of copy-write laws (freeware vs. shareware) while understanding video privacy laws. The knowledge of alternative careers in radio and television broadcasting will be presented with the functions of various production crew jobs. An exiting project such as the production of a resume tape for potential job interviews will be produced before exiting this class.

**PRACTICUM I – RTV 198**

**Suggested Grade Level: 12**

**Prerequisite: Any RTV course**

**Credit: 1**

**Course Description:** The Practicum provides supervised on-the-job work experience related to the student's educational objectives. Students participating in the Practicum do not receive compensation.

**WELDING (LOHS Course #921)**

**CUTTING PROCESSES – WLD 110 & Lab– WLD 111**

**Suggested Grade Level: 10-12**

**Co requisite: WLD 111**

**Credit: 2**

**Course Description:** This course presents a working knowledge of various cutting processes used by the welding industry. Will include, but is not limited to, safety, theory of operation, setup and operating techniques, troubleshooting, and making minor equipment repairs, terms and definitions, identification, evaluation, repair and prevention of discontinuities of cut surfaces. This includes oxy-fuel cutting, plasma arc cutting, exothermic cutting, air carbon arc cutting, shielded metal arc cutting, and mechanical cutting process. Various materials will be used where appropriate.

### **SHIELDED METAL ARC WELDING (SMAW) – WLD 120 & LAB (SMAW) – WLD 121**

**Suggested Grade Level:** 10-12

**Co requisite:** WLD 121 or Consent of Instructor

**Credit:** 2

**Course Description:** Teaches students the identification, inspection, and maintenance of SMAW electrodes; principles of SMAW; the effects of variables on the SMAW process to weld plate and pipe; and metallurgy. Also provides laboratory experiences in which the student acquires the manipulative skills to perform fillet welds in all positions

### **SMAW GROOVE WELDS W/BACKING LAB WLD 123**

**Suggested Grade Level:** 10-12

**Prerequisite:** WLD 120 and 121 or Consent of Instructor

**Credit:** 1

**Course Description:** Provides experiences in which students acquire the manipulative skills to do groove welds in all positions with backing.

### **GAS TUNGSTEN ARC WELDING- WLD 130 & LAB- WLD 131**

**Suggested Grade Level:** 10-12

**Co requisite:** WLD 131 or Consent of Instructor

**Credit:** 2

**Course Description:** This course provides the opportunity for identification, inspection, and maintenance of GTAW machines; identification, selection and storage of GTAW electrodes; principles of GTAW; the effects of variables on the GTAW process; and metallurgy. This course also teaches the theory and application of Plasma Arc Cutting. Teaches the necessary manipulative skills needed to apply the Gas Tungsten Arc on various joint designs, on plate with both ferrous and non-ferrous metals. Plasma Arc cutting is included.

### **GAS METAL ARC WELDING- WLD 140 & LAB- WLD 141**

**Suggested Grade Level:** 10-12

**Co requisite:** WLD 141 or Consent of Instructor

**Credit:** 2

**Course Description:** This course provides the opportunity for identification, inspection, and maintenance of GMAW machines; identification, selection and storage of GMAW electrodes; principles of GMAW; and the effects of variables on the GMAW process. Theory and applications of related processes such as FCAW and SAW and metallurgy are also included. Teaches the practical application and manipulative skills of Gas Metal Arc Welding and the proper safety situations needed in this process. Both ferrous and non-ferrous metals will be covered, as well as various joint designs on plate in all positions

### **BLUEPRINT READING for WELDING - WLD 170 & LAB - WLD 171**

**Suggested Grade Level:** 10-12

**Co requisite:** WLD 171 or Consent of Instructor

**Credit:** 2

**Course Description:** Provides a study of occupationally specific prints for welders. Advanced study of multi-view drawings, assembly drawings, datum dimensions, numerical control drawings, sheet metal prints, castings and forgings, instrumentation and control charts and diagrams, working drawings, geometric dimensioning and tolerancing and use of reference materials and books are included. Occupational specifics including welding drawings, symbols, joint types, grooves, pipe welding symbols, testing symbols, and specification interpretations are stressed. Provides students with practice fabricating from a blueprint. Students will read and fabricate from detail prints, control distortion during fabrication, and follow the proper sequence in welding a fabricated part. Students will use welding symbols and study weld sizes and strengths.

## HELPFUL WEB SITES

[www.commonapp.org](http://www.commonapp.org)

[www.thecollegehound.com](http://www.thecollegehound.com)

[www.ed.gov/thinkcollege](http://www.ed.gov/thinkcollege) - Think college early, No Child Left Behind, etc

[www.fastweb.com/](http://www.fastweb.com/)

[www.nacac.com](http://www.nacac.com)

[www.review.com/college](http://www.review.com/college) - The Princeton Review

<http://www.gocollege.com>

[www.anycollege.net](http://www.anycollege.net)

[www.collegenet.com/mach25](http://www.collegenet.com/mach25) - Apply on line to colleges

[www.collegeispossible.org](http://www.collegeispossible.org) - Help for middle & high school undeserved students

[www.CollegeView.com](http://www.CollegeView.com)

[www.aauw.org](http://www.aauw.org) education for women

[www.campusTours.com](http://www.campusTours.com)  
[www.kheaa.com](http://www.kheaa.com) - KEES money  
[www.fafsa.ed.gov](http://www.fafsa.ed.gov)- Financial Aid  
[www.finaid.org](http://www.finaid.org)  
[www.finaid.org/finaid/scams.html](http://www.finaid.org/finaid/scams.html)  
[www.pin.ed.gov](http://www.pin.ed.gov) - Applying for a Financial Aid Pin  
[http://www.ed.gov/prog\\_info/SFA/StudentGuide](http://www.ed.gov/prog_info/SFA/StudentGuide) - Aid from the Dept. of Edu  
[www.savingforcollege.com](http://www.savingforcollege.com)  
[www.FindTuition.com](http://www.FindTuition.com)  
[www.uncf.org](http://www.uncf.org) - The United Negro College Fund  
[www.fastweb.com/](http://www.fastweb.com/)  
[www.collegescholarships.com](http://www.collegescholarships.com) -Applying for scholarships  
[www.scholarships.com](http://www.scholarships.com)  
[www.freschinfo.com](http://www.freschinfo.com)  
<http://www.collegeaid.com>  
[www.studentservices.com/fastweb](http://www.studentservices.com/fastweb)  
[www.racingscholarships.com](http://www.racingscholarships.com) - scholarships and Educational Programs for the Equine Industry  
[www.hispanicfund.org](http://www.hispanicfund.org)  
[www.hbcunetwork.com](http://www.hbcunetwork.com)  
[www.BlackStudents.com](http://www.BlackStudents.com)

#### TESTING

<http://collegeboard.org> - SAT info  
[www.actstudent.org](http://www.actstudent.org)- ACT Online Prep and more  
[www.number2.com](http://www.number2.com)- free online test prep courses for ACT & SAT

#### MONEY FOR COLLEGE

[www.salliemae.com](http://www.salliemae.com) - Find Money  
<http://search.cashe.com> -How to pay for College  
[www.adventuresineducation.org](http://www.adventuresineducation.org) - General questions about college, scholarships, etc...

#### ATHLETICS

[www.eligibilitycenter.org](http://www.eligibilitycenter.org) - Sports  
[www.playnaia.org](http://www.playnaia.org)

