

# Worthington Kilbourne High School Course Planning Handbook 2018-2019



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# WORTHINGTON GRADUATION REQUIREMENTS

Students must earn a total of 18 points on the State of Ohio End of Course Assessments to be eligible to graduate. Points earned include at least four points in math, four points in ELA, and a total of six points combined in science and social studies.

## REQUIRED CREDITS

The Worthington School Board establishes the graduation requirements. The minimum requirements conform to those set forth by the state legislature, which governs the criteria for earning a high school diploma in the state of Ohio. The credits recommended for college entrance are derived from those set forth by the Ohio Department of Higher Education or state universities, together with those of many popular colleges.

Families should consult the web sites of specific colleges and universities to assure the student is fully prepared for admission to his/her school of choice. Similarly, students interested in continued education in a technical or business field should consult available resources for requirements specific to those institutions.

Athletes interested in pursuing college scholarships should also plan their programs very carefully. NCAA Division 1 and Division 2 scholarships are granted only to those who meet very specific high school requirements. You may download the NCAA Guide for the College-Bound Student-Athlete at [www.eligibilitycenter.org](http://www.eligibilitycenter.org)

## ENGLISH

Four credits of English are required. Students may take additional courses at any time but are encouraged to be enrolled in English every semester, including during their senior year.

## MATHEMATICS

Four credits of mathematics are required. Mathematics units must include 1 unit equivalent to algebra 2. Students who pass Math I, Math II, and Math III will fulfill this algebra 2 requirement. A 4th high school math credit could include any of the following: Financial Algebra, Transitions to College Math, Precalculus, Honors Precalculus, or Calculus.

## SCIENCE

Three credits of science are required. The first two are fulfilled through enrollment in the ninth/tenth grade series of courses (Physical Science and Biology). The third may be fulfilled by taking any of the remaining Science classes. All WKHS science courses qualify as lab sciences for college entrance.

## SOCIAL STUDIES

Three credits of Social Studies are required. One credit must be earned in Modern World History, one credit in American History, and one-half credit in American Government. The remaining one-half credit may be fulfilled through selecting one of the several elective courses available in the department.

## HEALTH & PHYSICAL EDUCATION

One semester of health and two semesters (1/2 credit) of physical education are needed to fulfill the requirement in HPE. Typically, health is taken in the tenth grade and physical education in grades nine and eleven (Wellness 4 Life, Strength Training, or Flex & Tone). Individual scheduling needs may require a change in this sequence. Athletes may select to waive the PE requirement by successfully completing two seasons of an approved activity between freshman and junior years. Completed PE waivers should be submitted to the

Athletic Director by the end of the student's junior year. All students who utilize the waiver must take an additional 1/2 credit elective to fulfill the required 20 credits for graduation.

## FINANCIAL LITERACY

One-half credit of financial literacy is required. Financial Algebra (1.0 credit), Economics & Financial Literacy (0.50 credit), IB History SL 1 1/2 credits), IB History HL (2 credits), and Personal Financial Management (0.50 credit), fulfill this requirement.

## FINE ARTS

Two semesters of fine arts are required and may be taken at any time in grades 7-12. Students following a career-technical pathway are exempted from the fine arts requirement.

## ELECTIVES

Five credits of electives are required which can include 0.5 credits of financial literacy and 1.0 credit of Fine Arts. They can include any combination of foreign language, fine arts, business, career-technical education, technology, English, mathematics, science, or social studies courses beyond those required. Wellness courses do not meet elective requirements.

## GRADUATION REQUIREMENTS

REQUIREMENTS FOR WORTHINGTON SCHOOLS	
AREA	CREDIT
English	4.0
Social Studies	3.0
Science	3.0
Mathematics (must reach equivalent of Algebra 2*)	4.0
Health	0.5
Physical Education	0.5
Electives (Wellness courses do not meet this requirement; Financial Literacy & Fine Arts requirements may be met in this area)	5.0
TOTAL	20.0

\*\*\*Additional College Recommendations: Most 4 year colleges/universities require 4.0 credits of Science and 2-3 years of the same global language. Highly selective colleges look for the most rigorous course selection across all content (AP and IB included), including 3-4 years of a global language.

**Graduation Requirements**

**Course Requirements + Assessment Requirements + Demonstration of Readiness =**

<p><b>Course Requirements:</b></p> <p>4 credits of English</p> <p>4 credits of Math (including equivalent of Algebra 2 – for us that is Math 3)</p> <p>3 credits of Science</p> <p>3 credits of Social Studies (including US History &amp; Government)</p> <p>½ credit of Health</p> <p>½ credit of Physical Education (if utilize waiver for athletic participation, must replace with ½ credit of elective)</p> <p>5 credits of Elective</p> <p>½ credit of Financial Literacy (can be met with PFM, Econ, Financial Algebra, or IB Social Studies classes)</p> <p>2 semesters worth of Fine Arts successfully completed between grades 7-12</p>	+	<p><b>Assessment Requirements:</b></p> <p>Take 7 End of Course Exams:</p> <ul style="list-style-type: none"> <li>- English 1</li> <li>- English 2</li> <li>- Math 1</li> <li>- Math 2</li> <li>- Biology</li> <li>- American History</li> <li>- American Government</li> </ul> <p>The higher a student scores on any end-of-course exam, the more graduation points he or she earns:</p> <p style="padding-left: 40px;">Advanced = 5 points Accelerated = 4 points Proficient = 3 points Limited = 2 points Basic = 1 point</p>	+	<p>Demonstration of Readiness: Meet one of the following three:</p> <ul style="list-style-type: none"> <li>- Earn cumulative passing score on seven end of course exams</li> <li>• 18 points overall</li> <li>• At least 4 points must come from English</li> <li>• At least 4 points must come from Math</li> <li>• At least 6 points must come from Science and Social Studies</li> </ul> <p><b>Earn a “Remediation Free” score</b> on the ACT. The state of Ohio will pay for students to take one of these tests when they are in 11th grade.</p> <ul style="list-style-type: none"> <li>• Students may use their highest verifiable score to meet this requirement</li> </ul> <p><b>Industry credential and workforce readiness:</b></p> <ul style="list-style-type: none"> <li>• Students earn 12 points through a State Board of Education-approved, industry-recognized credential or group of credentials in a single career field and achieve a workforce readiness score on the WorkKeys assessment. The state of Ohio will pay one time for those who take the WorkKeys assessment.</li> </ul>	=	H I G H  S C H O O L  D I P L O M A
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***ACADEMIC PLANNING FOR POST-SECONDARY SUCCESS/COLLEGE PLANNING***

Please see the WKHS counselor website at [www.wkhscounselors.com](http://www.wkhscounselors.com). Information can be found regarding college/career search and planning, college visits, scholarships, and college entrance exams (ACT/SAT).

***FOUR YEAR PLAN***

A four year planning form is provided for your use on page 6. The purpose of this form is to show you your four years as a whole. Although you may revise your plan each year, it is always wise to have a long-range plan.

**FOUR-YEAR PLANNING FORM**

<b>Content</b>	<b>Summer/ Other</b>	<b>Freshmen</b>	<b>Sophomore</b>	<b>Junior</b>	<b>Senior</b>	<b>Min. Credits</b>	<b>T o t a l Credits</b>
<b>English</b>		ELA I or Honors ELA I	ELA II or Honors ELA II	ELA III, AP English Language or IB English	Refer to chart in English Dept. section for Sr. Yr. options	<b>4.0</b>	
<b>Mathematics</b>		Refer to sequence chart in Math Dept. section	Refer to sequence chart in Math Dept. section	Refer to sequence chart in Math Dept. section	Refer to sequence chart in Math Dept. section	<b>4.0</b>	
<b>Science</b>		Physical Science, Honors Physical Science, STEM Biology	Biology, Honors Biology, STEM Physical Science	Upper Level Science	Upper Level Science	<b>3.0</b>	
<b>Social Studies</b>		Modern World History	American History or AP US History	American Government or AP Government	Social Studies Elective	<b>3.0</b>	
<b>Health</b>						<b>0.5</b>	
<b>Wellness</b>						<b>.25 + .25=0.5</b>	
<b>Electives</b>							
<b>Global Language</b>							
<b>Technology</b>							
<b>Computer Science</b>							
<b>Art</b>							
<b>Music</b>							
<b>Theater</b>							
<b>Business</b>							
<b>Total # Classes Scheduled</b>						<b>Total = 20</b>	

WKHS has 8 periods, one being for lunch; it is recommended that Freshmen, Sophomores and Juniors take six classes and that Seniors take at least 5 classes per semester.

Have I met my Financial Literacy Requirement (0.5 credits): Y N  
(Financial Algebra, Personal Financial Management, Economics and Financial Literacy, IB Social Studies)

Have I met my Fine Arts Requirement (1 year of Fine Arts grade 7-12): Y N

Students may waive their two quarter credits of Physical Education if they complete two seasons in an approved sport or activity before their senior year after completing the “Application for Physical Education Class Waiver.” Students will then need to supplement the missed half credit of Physical Education with another half credit in another course.

**GRADUATES WITH HIGHEST HONORS**

Graduates with Highest Honors are those students who after eight semesters achieve a grade point average of 4.0 or above. These students receive recognition at the Senior Recognition Program and during the commencement ceremony. The Graduates with Highest Honors can be recognized by their white stoles leading the commencement processional and have their names highlighted in the commencement program.

**HONORS DIPLOMA**

Per the Ohio Department of Education (ODE), high school students who exceed graduation requirements in Ohio are eligible to receive an Honors Diploma.

Students must achieve all but one of the requirements to be eligible for any of the Honors Diplomas. The following charts show the current three Honors Diploma criteria and the proposed six Honors Diplomas requirements for the Class of 2021 and beyond.

<b>Comparison of Diplomas with Honors Criteria</b> <i>Students need to fulfill all but one of the applicable criteria for the Diploma with Honors.</i>			
Subject	International Baccalaureate Diploma with Honors for Classes of 2012 and Beyond ***	Academic Diploma with Honors for Classes 2011 and Beyond	Career-Technical Diploma with Honors for Classes 2012 and Beyond
English	4 units, plus the two required International Baccalaureate essays	4 units	4 units
Mathematics	4 units, including Algebra I, Geometry, Algebra II or the equivalent and another higher level course or a four-year sequence of courses that contain equivalent content	4 units, including Algebra I, Geometry, Algebra II or the equivalent and another higher level course or a four-year sequence of courses that contain equivalent content	4 units, including Algebra I, Geometry, Algebra II or the equivalent and another higher level course or a four-year sequence of courses that contain equivalent content
Science	4 units including biology, chemistry and at least one additional advanced science ****	4 units, including physics and chemistry	<b>4 units, including two units of advanced science ****</b>
Social Studies	4 units	4 units	4 units
Foreign Language	4 units minimum, including at least 2 units in each language studied	3 units (must include no less than 2 units for which credit is sought), i.e., 3 units of one language or 2 units each of two languages	N/A
Fine Arts	1 unit	1 unit	N/A
Electives	N/A	N/A	4 units of Career-Technical minimum. Program must lead to an industry recognized credential, apprenticeship, or be part of an articulated career pathway which can lead to post secondary credit
Grade Point Average	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale
ACT/SAT Score [excluding scores from the writing sections]*	27 ACT / 1210 SAT	27 ACT / 1210 SAT	27 ACT / 1210 SAT
Additional Assessment	Must complete criterion-referenced assessments in a minimum of six academic disciplines	N/A	Achieve proficiency benchmark established for appropriate Ohio Career-Technical Competency Assessment or equivalent

\*Writing sections of either standardized test should not be included in the calculation of this score. Diploma with Honors requirements pre-suppose completion of all high school diploma requirements in Ohio Revised including: 1/2 unit physical education, 1/2 unit health, 1 unit in American history, 1/2 unit in government.

# Ohio High School Honors Diploma



Criterion	Ohio Diploma	Academic Honors Diploma	International Baccalaureate Honors Diploma	Career Tech Honors Diploma	STEM Honors Diploma	Arts Honors Diploma (Includes dance, drama/theatre, music, and visual art)	Social Science & Civic Engagement Honors Diploma
<b>Math</b>	4 units, must include one unit of algebra I or equivalent	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	5 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content <sup>4</sup>	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content	4 units, Algebra I, Geometry, Algebra II (or equivalent), and one other higher level course or 4 course sequence that contains equivalent or higher content
<b>Science</b>	3 units	4 units, including two units of advanced science <sup>2</sup>	4 units, biology, chemistry, and at least one additional advanced science <sup>2</sup>	4 units, including two units of advanced science <sup>2</sup>	5 units, including two units of advanced science <sup>2</sup>	3 units, including one unit of advanced science <sup>2</sup>	3 units, including one unit of advanced science <sup>2</sup>
<b>Social Studies</b>	3 units	4 units	4 units	4 units	3 units	3 units	5 units
<b>World Languages</b>	N/A	3 units of one world language, or no less than 2 units of each of two world languages studied	4 units minimum, with at least 2 units in each language studied	2 units of one world language studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied	3 units of one world language, or no less than 2 units of each of two world languages studied
<b>Fine Arts</b>	2 Semesters	1 unit	1 unit	N/A	1 unit	4 units	1 unit
<b>Electives</b>	5 units	N/A	N/A	4 units of Career-Technical minimum <sup>3</sup>	2 units with a focus in STEM courses	2 units with a focus in fine arts course work	3 units with a focus in social sciences and/or civics
<b>GPA</b>	N/A	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale	3.5 on a 4.0 scale
<b>ACT/SAT/WorkKeys<sup>1</sup></b>	N/A	27 ACT/1280 SAT <sup>8</sup>	27 ACT/1280 SAT <sup>8</sup>	27 ACT/1280 SAT <sup>7</sup> /WorkKeys (6 Reading for Information & 6 Applied Mathematics) <sup>7</sup>	27 ACT/1280 SAT <sup>8</sup>	27 ACT/1280 SAT <sup>8</sup>	27 ACT/1280 SAT <sup>8</sup>
<b>Field Experience</b>	N/A	N/A	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>	Complete a field experience and document the experience in a portfolio specific to the student's area of focus <sup>5</sup>
<b>Portfolio</b>	N/A	N/A	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts <sup>6</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic related to the student's area of focus that is reviewed and validated by external experts <sup>6</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>6</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>6</sup>	Develop a comprehensive portfolio of work based on the student's field experience or a topic that is related to the student's area of focus that is reviewed and validated by external experts <sup>6</sup>
<b>Additional Assessments</b>	N/A	N/A	N/A	Earn an industry-recognized credential or achieve proficiency benchmark for appropriate Ohio Career-Technical Competency Assessment or equivalent	N/A	N/A	N/A

*NOTE: Items shaded in blue are changes that were made to the honors diploma system, including the entire STEM, Arts, and Social Science and Civic Engagement Honors Diplomas*



**STATE ASSESSMENT TESTS**

Class of 2018 and Beyond	End of Course Exams-see page 5
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For more information on Common Core Standards and the End of Course Exams please see the link below:  
<http://oh.portal.airast.org/>

**EARLY GRADUATION POLICY**

Students may be eligible for graduation at the end of six or seven semesters providing they have met the requirements as outlined in this handbook. Any student wishing to be considered for early graduation must comply with the following procedures:

At least one semester prior to your proposed early graduation:

- Consult with your counselor and parents to discuss the ramifications of early graduation such as athletic eligibility.
- Complete the early graduation request form and have it signed by your parents. This request should be returned to your counselor.
- The request form must be signed and approved by your counselor and the principal.

**SCHOOL RECORD**

The Worthington Board of Education assumes that at the time of graduation each student will have fulfilled all academic and financial obligations. A good school record, scholastically and otherwise, is the best recommendation an applicant can offer either a college, a military recruiter or a prospective employer. A record of good personal behavior and cooperation will be expected.

**TRANSFER CREDITS**

When students enroll in Worthington Kilbourne High School from another school, the grades and credits earned from another high school will be indicated on the Worthington transcript by school year, the name of the school, courses and grades. These courses will not be calculated into the Worthington transcript gpa. Students entering WKHS from home school will need to have their coursework evaluated by a principal and credits will be granted as appropriate. These credits will be assigned a grade of "P" and indicated on the Worthington transcript by school year as "Home School."

Upon request of the student, when transcripts are sent to colleges or universities, a copy of the transcript from a student's previous high school will be included with the WKHS transcript. Colleges or universities may recompute the student's GPA using the transfer school's grade and/or grading scale for credits earned there and our scale for credits earned at Worthington Kilbourne High School.

**CREDIT FOR MIDDLE SCHOOL CLASSES**

Student work successfully completed in Global Language and 8th Grade Math I while in middle school will earn credit, but not be counted for GPA or for class rank.



# Scheduling Guidelines & Academic Policies

## *COURSE PLANNING*

This Course Planning Handbook is designed to help you plan your high school program of study. Graduation requirements are outlined, level placement is addressed and related policies are explained. Descriptions are provided of the nearly two hundred courses offered at Worthington Kilbourne High School with specific prerequisites listed so you know whether or not you qualify to take a given course. The Handbook also contains information about the many special programs available to our high school students.

Course planning decisions need to involve the student, teachers, counselor, and parents. Future goals and personal objectives and interests must always be kept in mind. The faculty and counselors will recommend specific courses for individuals depending upon assessed academic potential and past achievement records. During the registration process multiple opportunities exist for students and parents to gather information. You are strongly urged to get the information needed to be ready to select future courses in February. Requests to change course choices after that time are strongly discouraged and sometimes not possible.

## *STUDENT/PARENT RIGHTS UNDER TITLE IX AND THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT*

All students of the District have equal educational opportunities. Students have the right to be free from discrimination on the basis of race, color, national origin, citizenship status, religion, sex, economic status, marital status, pregnancy, age or disability, in all decisions affecting admissions; membership in school sponsored organizations, clubs or activities; access to facilities; distribution of funds; academic evaluations or any other aspect of school sponsored activities. Any limitations with regard to participation in a school sponsored activity are based on criteria related to that specific activity.

FERPA - The Family Educational Rights and Privacy Act (FERPA) affords parents and students who are 18 years of age or older ("eligible students") certain rights with respect to the student's education records. These rights are:

1. The right to inspect and review the student's education records within 45 days after the day that WKHS receives a request for access.
2. The right to request the amendment of the student's education records that the parent or eligible student believes are inaccurate, misleading or otherwise in violation of the student's privacy rights under FERPA.
3. The right to provide written consent before the school discloses

personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent. The written consent should be received by the WKHS registrar within two weeks of the beginning of school.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the school to comply with the requirements of FERPA.

## *ACADEMIC INTEGRITY*

Academic Integrity Background: At Worthington Kilbourne High School, we believe the students, staff and community are stakeholders in the climate and culture of our school. The school was founded on the belief that all students can and must learn in order to achieve success in our society. The community and staff further believe that success begins with personal and academic integrity, which are grounded in honesty, trust, fairness, respect and responsibility.

Academic and personal integrity are built upon continuous conversations about how these five values are embodied throughout our school. It is our belief that the pursuit of truth, the promotion of learning and the development of lifelong learners are indeed the conduit to personal success in our school and our democracy.

Raising the level of student integrity should remain our highest priority as a community of lifelong learners. In the spirit of that pursuit, the Academic Integrity Committee of WKHS offers the following:

**WKHS Culture** - The values of honesty, trust, fairness, respect and responsibility are worthy of our pursuit at WKHS. We strive to ensure success, exhibit integrity and serve humanity through these five essential values. Any lapse in exhibiting these values by any stakeholder does not condone misconduct of another stakeholder.

**Honesty** - Honesty is the foundation of teaching, learning, research and service. It is the prerequisite for full realization of trust, fairness, respect and responsibility. Policies at WKHS uniformly deplore cheating, lying, fraud, misrepresentation, theft and other forms of dishonest behaviors that jeopardize the rights and welfare of our learning community.

**Trust** - Mutual trust is formed in an academic community that celebrates the free exchange of ideas. Trust enables us to reach our full potential as human beings. WKHS believes people respond to consistent honesty with trust. Only with trust can our learning community believe in the social value inherent in academic inquiry, scholarship and integrity.

**Fairness** - Fairness evolves from predictability, clear expectations, consistency, careful listening and just responses to dishonesty. All students and staff have a role in ensuring an environment embracing fairness.

**Respect** - Respect is one of the rich rewards of an environment built on fairness. Teaching and learning demand active engagement and mutual respect. Students and faculty must respect their individual roles in order to appreciate diversity, learn and test new skills, build community and grow from failures. The antithesis of respect is being rude, sarcastic, demeaning or disruptive to others.

**Responsibility** - Responsibility requires that each stakeholder protect the integrity of the learning climate. Each person in the WKHS community must be responsible for his/her own honesty and personal responsibility and to encourage positive conduct by others.

WKHS Guidelines: Absolute integrity is expected of everyone at WKHS. Academic and personal integrity entail a firm adherence to a set of values essential to an academic community grounded in honesty, trust, fairness, respect and responsibility for all.

In honor of the five essential values, the faculty commits to the following:

- develop procedures for constructive feedback on all student endeavors
- give no student unfair advantage or disadvantage;
- be open to all student concerns;
- keep students and parents informed of student progress;
- set clear guidelines for assignments and evaluation of work;
- collaborate with each other to assist learners and not participate in gossip;
- follow school policies in responding to dishonesty;
- cultivate and model respect through regular attendance, punctuality and preparedness;
- incorporate current knowledge and practices;
- respect others work by citing sources.

Faculty, staff and parents expect students to honor the five essential values. Students will:

- model, encourage and support each other in maintaining academic integrity;
- treat all individuals, ideas, environment and property with respect, courtesy and dignity;
- respond honestly when asked about issues of fairness for themselves and others despite peer pressure, fear, loyalty, or compassion;
- cultivate and model respect through regular attendance, punctuality and preparedness;
- follow school rules in responding to dishonesty;
- prepare and submit their own work including that which is cited;
- collaborate with others when appropriate;
- use their positions, roles or memberships fairly and honestly.

Violations - The following are examples of activities that violate the CODE of ACADEMIC INTEGRITY. This is not a definitive list:

- knowingly representing the work of others as one's own;
- using, obtaining or providing unauthorized assistance on examinations, papers or any other academic work;
- fabricating data in support of laboratory or fieldwork;
- forging a signature to certify attendance, completion of a course assignment or any other gain for any purpose not authorized;
- advancing one's academic position unfairly by hoarding or damaging library materials;
- misrepresenting one's academic accomplishments;
- communicating, copying materials, allowing another to copy your materials, using unauthorized materials during a quiz, test, project or homework assignment;
- submitting falsified information for grading purposes;
- removing examinations or parts of examinations without the knowledge or consent of the faculty

member;

- impersonating or having another person impersonate a student to assist the student in some academic gain;
- stealing, using or accepting stolen copies of tests or answer keys;
- changing answers and seeking credit on an assignment or examination after work has been graded or returned;
- altering a teacher's grade book or computer records;
- falsifying information on applications such as scholarships, etc.;
- using computers, programmable calculators or the internet for violations of guidelines established by the faculty;
- committing any other violation intended to obtain credit for work that is not one's own.

The faculty of WKHS will include the statement below on all course syllabi:

In this class you will neither give nor receive unauthorized aid in class work, quizzes, examinations, preparation of reports or projects, or in any other work that I use to evaluate you without specific permission for collaboration or without proper citation.

Worthington Kilbourne Code of Conduct Honor Statement:

"As a student of integrity at WKHS, I have neither given nor received unauthorized aid on this assignment." This statement means that the student understands and has complied with the requirements of the assignment as set forth by the instructor. It is the faculty's intent that we will incorporate the above statement at the beginning or end of tests, quizzes and other assignments as a visible and external reminder of our highest expectations for all.

At Worthington Kilbourne High School we know academic integrity requires our attention to detail, vigilance in routines and clarity of expectations. The above work synthesized from the Kenan Ethics Program, the Center for Academic Integrity, student input and faculty conversations makes us a richer, stronger and more vibrant school for learning

### ***FEES***

As established by the Worthington Board of Education, a flat fee for academics is charged for all students. If your student attends Delaware Area Career Center, Linworth or CC+ (Columbus State) student fees will be prorated. If your student has free or reduced lunch, fees can also be prorated. There is a mandatory graduation fee for all seniors. If your student drives to school, there is also a parking fee. Fees are paid in August when students pick up their class schedule.

### ***STUDENT LOAD***

The typical student load is six classes per semester. Six is recommended for freshmen, sophomores and juniors and a minimum of 5 is recommended for seniors, although many take more in at least one of the semesters. Any variation on this requires special permission.

Students who plan to participate in co-curriculars (including athletics, cheerleading, theater and music programs, the Mock Trials team, and so on) need to plan their course load to ensure that they are earning

sufficient credits each grading period to remain eligible to participate during the next grading period. This means that, among the courses they are taking, they must be passing five courses, each of which carry one-half credit for the semester. If you are taking any combination of Wellness 4 Life, Flex and Tone, or Strength Training classes, please check with your counselor to ensure Co-Curricular credit eligibility requirements. Note that you must carry three graded courses of one-half credit or more per semester to be considered for honor roll and four to be considered for Academic Honor Awards. You must be passing a minimum of five one-half credit courses (or the equivalent) per semester and 1.25 credits per grading period to be eligible to participate in Co-Curriculars for the next grading period.

Students are cautioned to maintain consistency in the level of challenge represented by their course selections over the years. In specific, students should not plan to significantly reduce their load and the challenge of their courses for the senior year to ensure they are not reducing their chance of being accepted at the school or program of choice in their post-high school plans. Students and parents need to carefully consider the complexities and commitments of student and family life when making course selections. This often requires time for focused conversation and families may want to include the counselor in part of their decision-making process. Students should challenge themselves in ways which cause them to stretch and to learn without becoming overwhelmed. In particular, students who select a 7 class load need to weigh carefully the balance of their lives: academic, co-curricular, work and personal life. Careful consideration should be given to the amount of work a student can handle (both school work and employment) and still maintain involvement in other chosen activities and the family, while at the same time getting enough sleep. Caution should be used in selecting a schedule which is top-heavy with advanced placement or honors courses, especially in conjunction with co-curricular commitments.

### ***PASS/FAIL COURSES***

Students may elect to take designated courses on a pass/fail basis that they might not otherwise choose in view of the pressure for grades. To elect this grading option:

- Determine if the desired course is designated for the pass/fail option by checking the Course Planning Handbook.
- Obtain the appropriate form from the Counseling Center.
- Complete the form, including your parent's signature. Return form to the Counseling Center within the first 6 weeks of the semester.

Be aware that:

- The choice of pass/fail, once made, stays in effect throughout the course.
- School policy regarding adding or dropping a course still applies.
- Courses taken pass/fail receive graduation credit provided the student fulfills all course requirements.
- A grade of pass (P) or fail (F) will be issued for the semester grade.
- Pass/fail courses will not be counted in determining grade point average for Honor Roll, Class Rank or Academic Awards unless an "F" is received.

### ***INCOMPLETES***

Students receiving an Incomplete ("I") on their grade cards shall receive written notice from the teacher of the work to be completed to receive a grade and the date that work is due if credit is to be received. When possible, the student should sign the Notification of Incomplete form before copies are distributed to the student, parents and counselor.

Any work not completed by the date shown on the notice may not be made up and a grade of "F" or "zero" shall be given for the missing work. Teachers shall average the student's grades and record the grade received not later than the day following the date shown on the Notification of Incomplete form. The only exception to this rule is a student under documented doctor's care for whom the time may be extended as approved by the Assistant Principal for Student Services.

### ***REPEATING A COURSE***

When a student repeats a course, either to improve a grade or to gain credit because of a failure, the transcript will show both attempts and both grades. The higher of the grades earned will become the grade used for the GPA.

The repeated course will count toward the minimum course load a student must carry and the repeating grade in that course will count for athletic eligibility.

### ***AUDITING COURSES***

The purpose of auditing is to give the student an opportunity to explore a subject area by taking a course for no credit and no grade. An audited course will not count for athletic eligibility. No audit requests will be accepted after the third day of the semester.

The criteria for auditing are:

- The student is expected to complete all assignments and to take all quizzes and tests.
- The teacher is expected to maintain a record of grades, although no grade will appear on the student's grade card or transcript.
- If the teacher determines that the student is not performing at a satisfactory level or otherwise not fulfilling the expectations set forth for the course, the student will be expected to drop the audited course.

To request audit status:

- The student submits a request to audit a specific course to his/her counselor.
- The counselor or administrator determines whether or not there is space available in a section of the course requested.
- The teacher and counselor determine whether or not the student qualifies based on previous work.
- The student is notified regarding audit status.

## ***TRANSCRIPTS***

Current students may request transcripts for college and scholarship applications through the school registrar. Whenever possible, official transcripts will be sent electronically. Those unable to be sent electronically will be officially stamped, sealed and mailed. Upon request of the student, a previous high school's transcript will be included with the WKHS transcript. College Credit Plus courses will be calculated into the student's Worthington GPA.

Students wishing not to display SAT, SAT II, and ACT scores on their transcript must fill out a special request form for the school registrar to remove said scores.

## ***STUDENT SCHEDULE CHANGES***

The high school plans course sections and assigns staff based upon student requests at the time of course registration in February. Therefore, we ask students to give serious consideration to their course selections at that time and to not assume they will be able to change their selections later. Class size limits or other factors may preclude replacing one course with another.

Upon completion of course registration, if an insufficient number of students enroll in a particular course, that course is cancelled and the student's alternate course selection is substituted. Where enrollments are sufficient, reasonable class size limits are established; course sections are created, any need for a change in staffing is addressed, the master schedule is built, and textbooks and supplies are ordered. As schedules are run and adjustments are made to the master schedule, teachers and counselors help students resolve conflicts. It is our top priority that each student have a viable schedule for the coming year (one which includes the required number of courses and meets graduation requirements appropriate to that level) by the time the current school year ends.

Students who find they are failing or might fail a course should enroll in summer school as soon as they are aware of the possible failure. If the student then passes the course and summer school is not needed, the fee will be refunded. Students who fail a course and do not plan to make up the credit in summer school should notify their counselor as soon as possible of the need to repeat the course in the fall.

If, however, the student repeats a failed course or takes a course in the summer that he/she requested for the next school year, he/she must notify the counselor as soon as possible.

Valid Changes will be processed to the degree possible in the spring and as needed through the third day of school. Change requests will be considered to be valid if they result from one of the following reasons:

- schedule conflicts
- mechanical errors
- overloaded schedule
- graduation requirements

- physical health of the student
- change in graduation date
- completion of a correspondence or summer school course
- admittance to or return from the Career Center
- low / failing grades resulting in repeating a course or changing levels (teacher/counselor recommendation)
- specific college entrance requirements
- balancing class sizes (administrative)
- administrative changes (teacher/counselor recommendation)
- Co-Curricular/athletic eligibility requirements

A limited number of personal preference requests may be considered during the first three days of school by the Exceptions Committee to accommodate changes in circumstances.

Personal Preference Requests should adhere to the following reasons:

- addition of a class in place of Academic Prep or Options during the same period (class size permitting)
- converting an Option into a late arrival or early release during the same period(s)
- changing a lunch period with an Academic Prep or Option (lunch sizes permitting)

### Procedure:

- The student secures a Schedule Change Request Form from the Counseling Center. (Deadlines and guidelines will be stated on the form.)
- The student follows his/her current schedule until the request has been processed and, if a change is to be made, the new schedule has been generated.
- The student checks the status of the request daily (if during the school year) or periodically (if during the summer) until a decision has been finalized.
- All schedule change requests are subject to review by the Exceptions Committee.
- No requests are guaranteed.
- No change is to be assumed until a new schedule is generated.

## ***DROPPING A COURSE WITHOUT RECEIVING AN "F"***

To drop a course without receiving an F, the student must drop the course (through your Counselor) within six weeks of the beginning of the semester. Forms are available in the Counseling Center.

## ***EARLY RELEASE/LATE ARRIVAL Juniors and Seniors***

WKHS offers juniors and seniors the opportunity of not reporting to school until your first scheduled class or leaving school after your last scheduled class. You may request this option at the time of course registration in the spring. To do so, you and your parents must complete a form and return it to your counselor during your

registration appointment. While students are not guaranteed a release, every effort will be made to assign your requested classes to allow a release. When this is not possible, the release request will be dropped. Those students who do not choose to exercise this option will be expected to be at school during unscheduled periods. The library, computer lab, counseling center and cafeteria/commons will be available for your use based upon their capacity and scheduled use.

## ACADEMIC RECOGNITION

### *CLASS STANDING*

A student who has earned a minimum of fifteen (15) credits will be classified as a senior; ten (10) credits is the minimum for junior classification and five (5) credits for sophomore classification.

### *RANK IN CLASS*

Worthington Schools does not report class rank on the high school transcript. Feedback from high school counselors and college admissions officers across the country determined that this will benefit our students in the competitive college admissions process. We believe this decision helps universities look more carefully at the individual applicant to see beyond just a class ranking, which can sometimes be skewed in competitive high schools like those in Worthington. Counselors will include #1 rank for students with a 4.0 GPA or above on all college applications and recommendations. If you have questions about this policy, you may direct them to any counselor.

### *GRADE POINT AVERAGE*

All semester final grades received in Worthington subjects which could count toward graduation are used for computation of the student's GPA, with the exception of "S" and "P" grades. Grades earned in middle school for high school subjects are not used for computation of grade point average or rank in class. The same is true of courses which are audited or transferred into Worthington. Letter grades are equated as follows for semester courses:

A = 4.00 points    D = 1.00 point  
B = 3.00 points    F = 0 points  
C = 2.00 points

Note that in all cases pluses and minuses are not computed. Only Advanced Placement (AP), IB and College Credit Plus courses have "weighted" grades. The weighting system used equates letter grades as follows:

A = 5.00 points    D = 1.25 points  
B = 3.75 points    F = 0 points  
C = 2.50 points

## *STUDENT RECOGNITION PROGRAM*

### **1. Honor Roll**

The WKHS Honor Roll recognizes students who have met and/or exceeded rigorous academic standards. The Honor Roll is determined each semester based on grade point averages attained for that grading period. The following breakdowns have been established: 3.0-3.499 will be the merit roll; 3.50-3.99 the honor roll; and 4.0 and above the roll of highest honors. The WKHS Honor Rolls are published in the local newspaper and school website each semester.

### **2. Student of the Month\***

The Student of the Month program is sponsored by the PTO and recognizes individuals once in their high school career who have excelled in a variety of ways. Students might excel academically, as a good citizen, through achieving specific goals or in contributing their services to the school community. Students are nominated and pictures are placed in the display case in the bus lobby area, and receive a special letter from the principal and are awarded a school pin. \*Student of the Month alternates with Socratic Society and is held six times during the school year.

### **3. Socratic Society**

There are two induction ceremonies per year. A student may only be nominated once in their high school career. Students are chosen for demonstrating one or more of the Socratic core values and virtues: personal effort, compassion, life long learning, integrity and scholarship.

### **4. Academic Honor Awards**

The Academic Honor Awards Program is designed to motivate students at Worthington Kilbourne High School to achieve scholastic excellence and to honor the students who attain this goal. Scholastic achievement is the sole criterion for selecting the recipients of these awards.

Awards: A bronze key is awarded to students who have achieved a cumulative 3.5 GPA at the end of three full semesters. A silver key is awarded to students who have achieved a cumulative 3.5 GPA at the end of five full semesters. A gold key is awarded to students who have achieved a cumulative 3.5 GPA at the end of seven full semesters.

Presentation of Awards: The awards are presented at an evening ceremony in honor of the recipients during the second semester of the school year.

### **5. Senior Recognition Program**

The Senior Recognition Program is our most prestigious program for seniors and their parents. Seniors are recognized for academic, co-curricular, and/or athletic achievements earned during their high school career. Academic awards include college scholarships earned, as well as, high school accomplishments. co-curricular and/or athletic recognition is given for the outstanding achievements earned at the regional, state, or national level. Any graduation regalia earned will be presented at the Senior Recognition program.

## 6. Hall of Fame

The Worthington Kilbourne High School Hall of Fame has the following provisions:

- A. Students chosen for the Hall of Fame shall be members of the senior class and shall have attended Worthington High School for at least two years.
- B. Students shall be nominated by members of the junior and senior classes and selected by a student-faculty committee composed of the principal, five elected faculty members, the freshman, sophomore, and junior class presidents, and two senior representatives.
- C. Criteria for selection shall stress scholarship, leadership and co-curricular participation.
- D. No more than three students shall be selected in a given year and the committee may, in fact, decide to honor no students in a given year.
- E. The committee may also honor staff or community members for outstanding contributions to Worthington Kilbourne High School by naming them to the Hall of Fame. Upon selection to the Hall of Fame, a picture of the selectee is prominently displayed in the high school.

**7. National Honor Society** Each of the members of Worthington Kilbourne's Arnold Skidmore Chapter of the National Honor Society demonstrates the Four Pillars of Excellence: scholarship, leadership, character and service. Juniors and seniors who have cumulative grade point averages of 3.5 and above and meet the predetermined number of community service hours by the application deadline date are considered for induction. These students are identified and are asked to signify their interests by completing applications. Selection Procedures: Subsequently, the students who submitted profiles are evaluated by their teachers as to the students' levels of excellence in the Four Pillars. Often, the teachers cite examples in these evaluations.

Next, The Faculty Council convenes to review the profiles and the teachers' evaluations. The Faculty Council is comprised of five faculty members, and they are appointed annually by the principal. The data collected in these considerations is confidential as are the Faculty Council's deliberations. Worthington Kilbourne's NHS Faculty Advisors facilitate the consideration of candidates, but do not participate in membership selection.

Students will be notified by mail as to whether or not they have been invited to join the Arnold Skidmore Chapter of the National Honor Society. The induction ceremony is held soon thereafter; it is an evening event in our auditorium. Families and special guests are very welcome to attend.

The Arnold Skidmore NHS members are expected to uphold WKHS' chapter's requirements for continuing membership.

# ACADEMIC INTERVENTION

## *ACADEMIC ASSISTANCE: TEACHING AND LEARNING CENTER*

All freshmen and sophomores will report to "Academic Prep" in room 207 during their unscheduled class time. Academic Prep will include Intervention Assistance personnel next door in room 209 who will provide help to students in academic areas of study. Students will also be able to access the library, computer lab and counseling center. Juniors and seniors who are failing a course at the end of a nine week period will be placed in TLC and assigned to the Teaching and Learning Center until the end of the grading period with no failures in any classes. For further information contact your counselor or speak with one of the Academic Assistants in the Teaching and Learning Center.

What do the Academic Intervention Assistants do?

- One-on-one explanation of subjects and assignments
  - Walk-ins to room 209
  - Classroom teacher referrals
- Relationship building with individual students to achieve their learning targets
- Test review and preparation, and monitor students' academic progress on Infinite Campus
- Administer make-up tests
- Help students with test corrections
- Test preparation and practice, including test-taking skills
- Response to Intervention (RTI) reading and math readiness exercises, analysis of results
- Monitor interventions put in place for students by Intervention Assistance Team
- Administer tests out of the classroom for IEP/504 accommodations or absences
- Help students research assignment topics online or in print
- Edit written assignments for grammar and syntax

## *INTERVENTION ASSISTANCE TEAM (IAT)*

Intervention Assistance Teams (IATs) are school-based problem-solving groups that help school personnel with intervention strategies. IATs develop interventions to address academic, behavioral or emotional needs of students who are at risk. WKHS counselors facilitate all IAT meetings.

## *MATH INTERVENTION*

**Math Tutoring:** This high intensity tutoring opportunity is for students who have been identified by their teachers to receive additional individualized math help. Students meet in small groups during their unscheduled class time to receive extra help from our math faculty.

# PROGRAM OPTIONS

## *THE LINWORTH ALTERNATIVE PROGRAM*

The Linworth Alternative Program, housed on the Linworth Campus, is a part of the Worthington School System for students seeking the opportunity to become self-directed learners. The program provides students with a small school atmosphere in which a student may choose to learn in traditionally taught classes or through learning contracts, in seminars, through independent study projects carried on outside the building and/or through concurrent enrollment in a college or university. Courses not offered at the Linworth Campus may be taken at the student's home school. The Linworth Program deals with interpersonal relations, use of time, self-image, problem solving and independent learning. Basic curriculum goals are the same as those of the other two campuses.

The program is limited to 180 students. Each person desiring admission must visit the school, interview with a staff person and complete an application. Persons interested in this program should contact the Director of the Linworth Program for additional information.

Students accepted into the program are expected to meet Worthington Schools' graduation requirements in addition to meeting the requirements of the Linworth program. These requirements include:

1. Interest in developing life long learning skills.
2. Participation in at least one community service activity each year.
3. One or more independent self-directed learning projects each year.

While there is no grade point requirement for entry into the program, there is an expectation that each applicant has the necessary basic skills to successfully complete the standard high school curriculum.

Many of the classes at Linworth are designed by staff with student input.

Some examples of classes unique to the Linworth campus are:  
Essential Books - a seminar course dealing with great works of literature

Walkabout — a semester-long, off-campus experiential learning opportunity for second semester seniors who have met all graduation requirements

For more information, contact your counselor or the Director of the Linworth Program.

## *WORTHINGTON ACADEMY*

### **Who should attend?**

Worthington Academy will provide an additional educational setting for Worthington high school students that are credit deficient and/or looking for a different educational environment. The curriculum will be enhanced through the use of technology.

Courses offered at the Worthington Academy will be in the areas of mathematics, English language arts, social studies and science. All courses will be a blended learning environment where students will be able to engage in online content, learn at their personal pace and engage with teachers in a small learning environment. The goal for student to teacher ratio is 15:1.

Students will schedule a morning or afternoon session at the Worthington Academy. Students will then have flexibility to take elective courses back at their home high school, participate in co-curricular activities and all aspects of student life. Worthington Academy will work with students and families to develop a flexible plan that meets their individual needs.

Students interested in attending the Worthington Academy should see their school counselor for application information and forms. All Worthington Academy applications should be returned to their school counselor. Seniors, or students approaching graduation, will receive priority scheduling. Students will be notified of their selection to the Worthington Academy towards the end of the current school year.

### **Academy Admittance:**

- Students currently enrolled in Worthington Schools will apply to the Academy for the next school year during registration. Students entering Worthington Schools will have an admission process through the "Welcome Center". Students who already attend Worthington Academy will be able to register with the Worthington Academy, but staff will review personal plans with students and families .
- Academy staff will monitor student registration process and admit students. School counselors should turn in application materials to appropriate Academy Staff
- Seniors, or students approaching graduation, will receive priority scheduling.
- Once students are admitted, Academy staff will schedule a Family Pathway Meeting to set goals, create their personalized pathway and program expectations.
- As students complete their individualized pathway, building student referrals will then be processed and seats will be filled. This process will occur throughout the school year.
- If students do not make progress to meeting their goals established in the Family Pathway Meeting, they may be asked to rescind their seat and return to their home school.

### **Worthington Academy placement includes:**

- Academic Focus - A blended learning environment will support the individual needs of students including credit recovery, credit advancement and personalized intervention.
- Career Exploration - Students will have opportunities to explore career activities, opportunity for skill development, work experience and potential credit through CBIP or Credit Flex.
- Counseling Services - Counseling services will be available to focus on development of self-esteem, reframing our situations to be structured for success and work with students and families.
- Goal Setting - Short and Long term goals will be established at Family Pathway Meeting. Goals will be monitored by students



and staff and communicated with family members.

**Worthington Academy will:**

Initially there will be parent informational meetings to make certain parents receive an overview of the academy plan and philosophy. Individual Family Pathway meetings will occur with each student for scheduling purposes during spring or summer.

As students surface through the year the academy will provide Family Pathway Meetings with the following present:

- Parent(s)/Guardian
- Building Level Principal or building designee at students assigned campus
- Worthington Academy Instructor/Principal
- Counselors will also be invited from the student's home school unless one counselor is designated as the building representative for the Worthington Academy.
- Provide weekly feedback regarding progress for each student via e-mail to parents through online content provider.

## ***ENGLISH LANGUAGE LEARNERS***

The English Language Learners Program is designed to meet the needs of those students whose limited proficiency in the English language make them unable to perform successfully in the regular curriculum. Course offerings through this unit include a Guided Studies course and a Reading course. Individual programs are designed for each student based upon the student's ability to communicate in English.

## ***HOME BOUND and HOSPITAL INSTRUCTION***

Home instruction is an individualized special education program provided to a student with a handicap which prevents the student from attending a regular or special education program, even with the aid of special transportation.

In establishing eligibility for home instruction, the following criteria must be met: the student must have more than 15 consecutive days of school absence or more than 20 days of intermittent absence related to the same health impairment to be eligible for this program. If it is known at the beginning of the absence that this amount of time or more will be involved, home instruction may begin as soon as eligibility is determined, a tutor is secured and an "Individualized Educational Program" is in place.

In all cases a statement from a physician verifying the diagnosis and the length of absence must be on file before determination of eligibility can be made. The parent/guardian must notify the school attendance office that home instruction services are being requested. At that time the parent/guardian will be asked to obtain a home instruction application from the building school psychologist who, in turn, will arrange a Multi-Factored Evaluation team meeting. In general the school psychologist coordinates the home instruction procedure between the student, parent/guardian and school.

## ***CREDIT FLEXIBILITY***

Credit Flexibility may be used to expand and enrich students' learning experiences and opportunities. These experiences must maintain the educational standards adopted by the district through its course of study. Before students may begin any course through credit flexibility, a plan must be submitted and signatures signifying approval obtained. Credit Flexibility applications are available on the district and high school websites.

Credit Flexibility options may include, but are not limited to:

- correspondence courses
- online courses
- educational travel
- service learning
- independent study
- demonstration of mastery
- college course work (Post-Secondary Enrollment)

For more information about Credit Flexibility, please refer to the Credit Flexibility plan on the Worthington Schools website.

## ***CREDIT RECOVERY***

(Counselor Recommendation)

For many learners, making up lost ground can seem overwhelming. Worthington Schools partners with online schools to provide our student learners with an online experience that is media-rich and highly interactive, making credit recovery engaging and attainable. They are an industry expert in proven, effective credit recovery solutions. By focusing on instruction that fills knowledge gaps and provides a personalized learning experience, they target the specific issues that have prevented learners from moving forward.

## ***SENIOR PROJECT***

Senior Project allows seniors to exit the classroom the last four weeks of their senior year\* to engage in a real-world experience of an internship, a service-learning project or a research project. Reasons to apply for this unique and valuable experience include:

- You connect to the "Why?" of many skills and concepts you've learned;
- You experience hands-on, practical applications in a real-world setting;
- You make important connections for summer jobs and college internships;
- You get a break from the regular school schedule and still get to participate in co-curricular activities;
- You can try on a career to see if it fits;
- You bring your high school career to meaningful conclusion.

With no classes to attend, +seniors on project put in five hours a day, five days a week for the last four weeks of school, a total of 100 hours. Students in previous years have interned in hospitals, in schools, at PromoWest, with police and fire departments, with accountants, at restaurants, at museums, the zoo, with lawyers,

with architects, at nursing centers. One student conducted her internship in Cleveland; two students flew to Quito, Ecuador for theirs. There are virtually endless possibilities and opportunities.

In mid-November, the senior project advisor will present and distribute information at a senior homeroom and from that point guide all interested seniors through the complete process, including a successful senior project.

\*See senior project advisor for eligibility requirements

+Seniors in AP classes may attend those classes through AP exam days

### ***SUMMER SCHOOL***

Summer school is offered to Worthington Schools students as well as students from other districts. High school students may choose to enroll in summer school

- for credit recovery or extended school year services,
- for support/skill-building, and
- for enrichment and/or get-ahead courses.

The high school program is conducted as a four-week summer session in June.

- Most traditional face-to-face courses will run the first three weeks of the June session.
- Credit recovery will run the full four weeks in June; select credit recovery students will be invited to a two-week July extended session.
- Blended get-ahead courses will extend beyond the four-week June session; students in blended courses will have access to their course materials during the last week of May and will complete requirements during the last week in July.

All information (including how to register) for summer school is online at [www.worthington.k12.oh.us/summerschool](http://www.worthington.k12.oh.us/summerschool). Registration begins in late January. Early-bird registration for all courses (except credit recovery) ends April 30. Families will be notified by the second week of May if courses must be cancelled due to insufficient enrollment.

Inquiries about summer school should be directed first to the student's counselor and then, if needed, to Leah Baker at the Worthington Education Center (450-6088 or [lbaker@wscloud.org](mailto:lbaker@wscloud.org)).

### ***SPECIAL EDUCATION***

When a student has been evaluated through a Multi-Factored Evaluation and determined to have a disability according to the Individuals with Disabilities Education Improvement Act (IDEIA) and Ohio's Operating Standards for Ohio Educational Agencies Serving Children With Disabilities, a student may receive educational services through special education. Disabilities under IDEIA include: multiple disabilities, deaf, blind, hearing impairment,

visual impairment, speech-language, orthopedic disability, other health impairment, emotional disturbance, specific learning disability, autism and traumatic brain injury. An Individualized Education Program, identifying an individual student's needs and the special education services needed to provide the student with free, appropriate, public education, is developed by parents and school personnel. If determined eligible, a student may also receive related services such as transition services, occupational therapy, adapted physical education and speech-language services. A continuum of special education services is available, including direct instruction, supportive instruction to the regular classroom, and consultation.

If a parent suspects that their child may have a disability, they may contact the building principal or the Director of Special Education at 614-450-6000 for information regarding the Intervention Assistance Team process for possible referrals to special education.

### ***BLENDED LEARNING***

Blended Learning is a formal program in which students learn in multiple settings, including online and face-to-face, with some control over the pace, path and place of their learning. Blended Learning courses are designed and facilitated by Worthington teachers who seamlessly and intentionally integrate technology and instructional best practices so that learning is accessible and personalized for all students.

Current blended offerings at WKHS:

- AP Language and Composition
- English 3
- Contemporary Voices
- Science Fiction
- Global Scholars I, II, III, IV
- Digital Art
- Multimedia and Advanced Multimedia

Please see course descriptions in each department section.

### ***COLLEGE CREDIT PLUS***

#### ***College Courses Being Offered at WKHS through College Credit Plus***

College Credit Plus (CC+) allows students in grades 7-12 to take courses and earn both high school and college credit. The grades and credits earned appear on both the student's high school and college transcripts. Students can earn up to 30 credits per year. (Maximum of 120 credit hours total.)

#### **Where can students take courses?**

Eligible students can take courses at the high school taught by a high school teacher, at the high school taught by a college instructor or at the college (online or live). Students may choose to take courses in any combination of formats or with any combination of Ohio colleges. Please be aware that no matter where the course is offered (at the college campus, online or at WKHS), the course will follow the same college course syllabus, use the same textbook, and be assessed using the same methods and grading standards.

## College Credit Plus Courses offered at WKHS

### What does it cost?

There is no cost for the student to participate in College Credit Plus when the student is enrolled in a public college or university. The high school and college share the cost for these course(s). Students choosing to enroll in a participating private college or university might incur costs. If a student fails a course, the student will be expected to pay for the course.

### When can I participate?

Students can take classes during the summer, fall or spring semesters or any combination of terms provided that the student does not exceed 30 hours in that academic year (beginning with summer term). It is important to meet all college deadlines in order to participate.

### What classes can I take?

Students may take any course offered in the college's course catalog for which the student has met the prerequisites. Course options include traditional courses and online courses. The courses offered at WKHS are listed below.

### Requirements:

All students interested in participating in CC+ must attend a College Credit Plus information counseling session with a parent/guardian. Worthington will host one of these nights on Thursday, February 1st at 7pm in the Worthington Kilbourne High School Auditorium. This presentation will fulfill the state's requirement for the counseling information session. Students who are not able to attend this presentation should contact their counselor for alternate dates and locations of presentations for fulfilling this requirement.

### I want to participate, what do I do next?

1. Submit the written notice of intent to participate for the following school year between February 15 and April 1.
2. Select the CC+ classes you intend to take during the course registration process.
3. Apply to the college(s) of choice. Please be aware that colleges will have different deadlines for various terms and students must apply prior to the deadline for their intended college(s).
4. Upon acceptance to the college(s), complete testing requirements to assure placement into your intended courses. If you are not accepted or do not place into your intended courses, you must immediately notify your counselor and select alternate courses for your schedule.
5. Follow through with completing any requirements established by the college.

### Questions:

Students who have additional questions should refer to the counselor website – [www.wkhs counselors.com](http://www.wkhs counselors.com) – for more information about CC+ under Academic Options or see their counselor.

### PRE-CALCULUS/ HONORS PRE-CALCULUS (MATH 150)

2 Semesters	Grades: 9,10,11,12
5 college credits,	Prerequisite: See below
1 high school math credit	Graded: Conventional taught by WKHS teacher

This course is a study of algebraic functions, trigonometry, vectors, conic sections, sequences and series. The course will include the study of polynomial, rational, radical, exponential, logarithmic and piece-wise defined functions, and the trigonometric functions and their graphs. Topics investigated will include domain, range, graphs, inverses, operations, equations, inequalities and their applications.

Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

### AP CALCULUS AB (MATH 200)

2 Semesters	Grades: 9,10,11,12
5 college credits,	Prerequisite: See below
1 high school math credit	Graded: Conventional taught by WKHS teacher

Concepts of limits of functions are covered including continuity of functions. The definition of the derivative as well as rules for differentiation develop the ability to find the derivatives of functions, including polynomial, rational, algebraic, trigonometric, inverse trigonometric, exponential, logarithmic, hyperbolic and inverse hyperbolic functions. Derivatives are used in curve sketching as well as in solving applied problems. The Mean Value Theorem and Newton's Method for optimization are covered. Definite and indefinite integrals, the Fundamental Theorem of Calculus, the substitution method and area between curves are discussed. Requires:

- Successful completion of Math 150
- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

### AP CALCULUS BC/MATH 200 AND MATH 210

2 Semesters	Grades: 9,10,11,12
5 college credits, for each	Prerequisite: See below
1 high school math credit for each course	Graded: Conventional taught by WKHS teacher

Concepts of limits of functions are covered including continuity of functions. The definition of the derivative as well as rules for differentiation develop the ability to find the derivatives of functions, including polynomial, rational, algebraic, trigonometric, inverse trigonometric, exponential, logarithmic, hyperbolic

and inverse hyperbolic functions. Derivatives are used in curve sketching as well as in solving applied problems. The Mean Value Theorem and Newton's Method for optimization are covered. Definite and indefinite integrals, the Fundamental Theorem of Calculus, the substitution method and area between curves are discussed. Requires:

- Successful completion of Math 150
- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**INTRO TO PROGRAMMING LOGIC (CSCI 1103)**

Grades: 9,10,11,12  
1 Semester Prerequisite: See below  
3 college credits, Graded: Conventional  
1 high school elective credit taught by WKHS teacher

Introduces concepts of programming logic through algorithmic solutions applied to problem-domain scenarios. Examples of these scenarios are Computer Science disciplines such as programming languages, networking, operating systems, databases and others. The course covers the basic units of logic: sequence, selection and loop. Students repair faulty algorithmic solutions. The course also uses basic UML (Unified Modeling Language) notation to model problem-domain objects, via classes.

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**ENGINEERING DESIGN & DEVELOPMENT**

Grades: 12  
1 Semester Prerequisite: IED,POE, & DE  
1 Credit Graded: Conventional

This course lets students apply what they have learned in core academic and Project Lead the Way course as they complete challenging, self-directed projects. Students work individually and in teams to design and build solutions to authentic engineering problems. An engineer or other appropriate business professional from the school's partnership team mentors each student. Examples of projects may include a robotic mascot for the school, a remote-controlled hovercraft, or a solar-powered device. This course equips students with the independent study skills that they will need in post-secondary education and careers associated with the business of engineering and engineering technology.

**INTRO TO BUSINESS (BUS 105)**

Grades: 9,10,11,12  
1 Semester Prerequisite: See below  
3 college credits, Graded: Conventional  
1 high school elective credit taught by WKHS teacher

This introductory course explains the principles, terminology and concepts necessary for interpreting business. Activities and presentations are provided to the student that will allow him or her to identify business environments, business ownership, ethi-

cal issues, global business awareness, organizational structures, management and marketing principles, technology information and financial implications in society. Upon completion of the course, the student will have a better understanding of the various elements of the business process, with this assisting in both the student's personal and professional life. Requires one of the following:

- None required

**INTRO TO PSYCHOLOGY (PSY 1100)**

Grades: 9,10,11,12  
1 Semester (Fall) Prerequisite: See below  
3 college credits, Graded: Conventional  
1 high school social st. credit taught by college instructor

This introductory course provides an overview of the origins, growth, content and applications of psychology, including the application of the scientific method to the following topics: research methodology, beginning statistics, theories of physical, cognitive, moral and emotional development, sensation, perception, learning, motivation, intelligence, memory, personality, coping processes, abnormality, adjustment, and the individual in small groups and a pluralistic society. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**COMPOSITION 1 (ENGL 1100)**

Grades: 9,10,11,12  
1 Semester (Fall) Prerequisite: See below  
3 college credits, Graded: Conventional  
1 high school English credit taught by college instructor

English 1100 is a beginning composition course which develops processes for critically reading, writing, and responding to a variety of texts in order to compose clear, concise, expository essays. The course facilitates an awareness of purpose, audience, content, structure and style, while also introducing research and documentation methods. Course reading and writing assignments may be thematically organized. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**COMPOSITION 2 (ENGL 2367)**

Grades: 9,10,11,12  
1 Semester (Spring) Prerequisite: See below  
3 college credits, Graded: Conventional  
1 high school English credit taught by college instructor

ENGL 2367 is an intermediate composition course that extends and refines skills in expository and argumentative writing, critical reading and critical thinking. This course also refines skills in researching a topic, documenting sources and working collaboratively. Course reading and writing assignments are organized around the diversity of those who comprise the identities. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**INTRO TO AMERICAN GOVERNMENT (POLS 1100)**

Grades: 9,10,11,12  
 1 Semester (Spring) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school social st. credit taught by college instructor

This course introduces students to the nature, purpose and structure of the American political system. Attention is given to the institutions and processes that create public policy. The strengths and weaknesses of the American political system are discussed, along with the role of citizens in a democracy. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**INTRO TO SOCIOLOGY (SOC 1101)**

Grades: 9,10,11,12  
 1 Semester (Spring) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school social st. credit taught by college instructor

This course introduces the basic concepts, methods and findings of sociology as a scientific discipline. The sociological perspective, emphasizing social interaction and structure, is used to explore the following topics: culture; socialization; social groups, including organizations; deviance; various types of social inequality; major social institutions; collective behavior, social movement and social change. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**ETHICS (PHIL 1130)**

Grades: 9,10,11,12  
 1 Semester (tentatively Fall) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school social st. credit taught by college instructor

This course introduces students to moral reasoning, examining theories of right and wrong, good and bad, justice and injustice as they have been viewed in the past and as they shed light on contemporary ethical issues. PHIL 1130 meets elective requirements in the Associate of Arts and Associate of Science Degree programs and distributive transfer requirements in philosophy and humanities. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**AFRICAN AMERICAN HISTORY 1 (HIST 2223)**

Grades: 9,10,11,12  
 1 Semester (Tentatively Fall) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school social st. credit taught by college instr.

The class is primarily a lecture/discussion course which includes the history of African Americans in the New World from the time of the slave trade to the end of Reconstruction. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**HISTORY OF ART (HART 1201)**

Grades: 9,10,11,12  
 1 Semester (Tentatively Fall) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school fine arts credit taught by college instr.

This course is a historically based introduction to the study of visual arts in the West. Through a critical examination of the fundamental formal concepts and the historical developments in the visual arts, this course examines the visual expression of culture from the Prehistoric Era to the early Renaissance. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**PHYSICAL GEOLOGY (GEOL 1121)\***

Grades: 9,10,11,12  
 1 Semester (Tentatively Spring) Prerequisite: See below  
 4 college credits, Graded: Conventional  
 1 high school science credit taught by college instructor

This course offers a detailed understanding of the processes and the materials that shape the Earth. Topics include the origin of minerals and rocks, development of landforms and structural features, and environmental changes associated with these processes. Related laboratory and demonstrations. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

**CLASSICAL MYTHOLOGY (CLAS 1222)**

Grades: 9,10,11,12  
 1 Semester (Tentatively Spring) Prerequisite: See below  
 3 college credits, Graded: Conventional  
 1 high school social st. credit anticipate course being purely online

This course is an introduction to the world of mythology through the study of myths from Greece and Rome. The course explores some of the religious ideas, traditions and values that distinguish one civilization from another, while also indicating universally shared themes. Attention will be given to cultural expression of mythical themes in literature and art. Requires:

- Students must meet the prerequisite standards put in place by Columbus State Community College. Please check their website at [www.csc.edu](http://www.csc.edu) for the most up-to-date information regarding prerequisites.

# CO-CURRICULAR ACADEMIC ELIGIBILITY

Parents and Students Please Take Special Note:

Please note that participants in co-curricular activities, which include, but are not limited to participation on athletic teams, must pass a minimum of 1.25 credits each nine weeks and 2.5 credits each semester. This translates to: five half credit periods each nine weeks and semester; each course period equals either a .25 credit for a nine-week passing grade and a .50 credit for a passing semester grade.

If you register for Wellness 4 Life, Flex & Tone, Strength Training or Global Scholars it is imperative that you **double check your balance of credits** in August of the new school year. Physical Education classes only count for .125 credit for a nine-week passing grade and a .25 credit for a passing semester grade. This could render you ineligible for sports and co-curricular activities if you are not taking enough classes.

You should add an additional half credit during the semester in which you have signed up for any Physical Education classes, i.e., 5 classes in addition to your Physical Education class..

Be sure to check with your counselor and the athletic office in August if you have any questions whatsoever about your eligibility for the coming school year. Athletes and participants in non-athletic co-curriculars that compete are required to meet the OHSAA academic requirements and Board of Education academic requirements in order to participate in their activities. The following list of co-curricular sports and activities are affected by the Worthington Board of Education policy:

## ATHLETICS

### Fall:

Cheerleading  
Cross Country (B&G)  
Field Hockey (G)  
Football  
Golf (B&G)  
Soccer (B&G)  
Tennis (G)  
Volleyball (G)  
Water Polo (B&G)

### Winter:

Basketball (B&G)  
Cheerleading  
Gymnastics (G)  
Ice Hockey  
Swimming (B&G)  
Diving (B&G)  
Wrestling  
Bowling (B&G)

### Spring:

Baseball(B)  
Lacrosse (B&G)  
Softball (G)  
Tennis (B)  
Track & Field (B&G)  
Volleyball (B)

## ACTIVITIES

Applied English (Stagecraft)*	Pep Band
Art & Community Service Club	Project More
Class Officers	Prom Fashion Show
Dance Team	REACH Buddies
Fellowship Christian Athletes	Sciende Olympiad
Flower Patch Kids	Senior Project
French Exchange	Sports Medicine Club
Gay/Straight Alliance	Student Council
Girl Talk	Symphonic Band*
Global Language National Honor Society	Symphonic Choir*
In-The-Know Team	Theater Productions
Interact	Thespian Society
Intramural Basketball	Wind Ensemble*
Jazz Band	*Wind Symphony
Kilbourne Krazies	WKHS News* (Video Production)
Kilbourne Singers*	Wolves for Cubs (not school sponsored)
Lincoln-Douglass Debate	WOR-BOTS)
Link Crew	Writing Awards
Literary Magazine (Prospice)	Yearbook* (The Sentinel)
Marching Band	
Math Club	
Mock Trial Team*	
Musical Productions	
National Honor Society	
Newsmagazine*	
(The Ravine and The Creek)	
Orchestra*	

Eligibility is determined by the grades received in the PRECEDING nine weeks of the grading period **and** by the PRECEDING semester grades as well.

First Nine Weeks Eligibility: To be eligible for the 1st nine weeks, all 10th, 11th, and 12th grade students must have earned 1.25 credits during the last nine-week grading period of the previous school year **and** a minimum of 2.5 credits for the 2nd semester.

Courses taken as Pass/Fail are counted, if passed.

If a high school student earns 1.25 credits, but not 2.5 credits for the second semester, a student may be able to reinstate their athletic and co-curricular eligibility by attending summer school, or other methods approved by the building principal. Principal approved methods and summer school classes count only for the semester requirement.

Students entering the 9th grade for the first time must have passed 5 courses taken during the fourth quarter of the 8th grade year.

Second Nine Weeks Eligibility: To be eligible for the 2nd nine weeks, all 9th, 10th, 11th and 12th grade students must have earned 1.25 credits during the first nine weeks.

Third Nine Weeks Eligibility: To be eligible for the 3rd nine weeks, all 9th, 10th, 11th and 12th grade students must have

earned 1.25 courses for the second nine weeks, *and* earned 2.5 credits for the 1<sup>st</sup> semester.

Fourth Nine Weeks Eligibility: To be eligible for the 4th nine weeks, all 9th, 10th, 11th, and 12th grade students must 1.25 credits for the 3rd nine weeks.

### OHSAA REGULATIONS

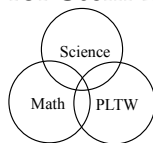
The eligibility standards of the OHSAA have been adopted by the member schools and were accepted by your school when it became an OHSAA member. You are urged as a student athlete to study these standards carefully.

OHSAA regulations and eligibility requirements can be found on the OHSAA website at [www.OHSAA.org](http://www.OHSAA.org).

Always check with your school principal or athletic director before you change schools to determine whether it will affect your eligibility.

## STEM PATHWAY

A Vision for Stem Education



The vision for STEM education for Worthington Schools is to engage students in a rigorous integrated PK-16 inquiry-based education that substantially increases the numbers of youth who possess not only the valuable skills of problem solving, logical thinking, and innovating, but who graduate from high school both college and career ready.

We believe it is vital that we prepare students for an increasingly global economy. Due to technological advances and the presence of the world-wide web, Americans will compete with people from all over the world for the high tech high wage jobs of the future. We must improve the quality of America’s workforce by ensuring that students become effective critical thinkers, communicators, problem solvers, innovators, and inventors.

We believe the most impactful way we can teach rigor (Core Knowledge), and relevance, (meaningful connections to what society needs from us), is through an integrated collaborative approach in which our math, science, English/language arts and technology teachers work collaboratively. Worthington’s STEM instructional model emphasizes the integration of course content with an emphasis on applied problem solving through real-world relevant project based lessons. Inquiry is at the heart of the STEM program.

An emphasis of Worthington STEM is the development of a “Can Do” attitude with the students. This attitudinal growth should manifest in a way that students become so proficient and comfortable with core content knowledge AND design processes and problem solving models that they are comfortable with engaging

in complex, ill-defined problems in a dynamic setting.

Worthington’s STEM program also places an emphasis on taking the students out into real world (field trips) settings as well as bringing the real world to our students. Both college faculty and industry professionals are involved in mentoring and assisting in the evaluation of student work.

STEM Pathway - Freshmen		
Math 1 3002	STEM Physical Science 4001	Intro to Engineering 7360
Math 2 3003	STEM Physical Science 4001	Intro to Engineering 7360
Honors Math 2 3012	STEM HonorsBiology 4007	Intro to Engineering 7370
STEM Pathway - Sophomores		
Math 2 3003	STEM Biology 4004	Principles of Engineering 7361
Math 3 3006	STEM Biology 4004	Principles of Engineering 7361
Honors Math 3 3014	STEM Physical Science 4011	Principles of Engineering 7372

## The IB Diploma Programme at WKHS

### History and Mission Statement of the International Baccalaureate

The International Baccalaureate® (IB) was founded in Geneva, Switzerland in 1968 as a non-profit educational foundation. A group of talented, forward-thinking teachers at the International School of Geneva, with assistance from several other international schools, created the IB Diploma Programme.

At our heart we are motivated by a mission to create a better world through education. We value our hard-earned reputation for quality, for high standards and for pedagogical leadership. We achieve our goals by working with partners and by actively involving our stakeholders, particularly teachers.

We promote intercultural understanding and respect, not as an alternative to a sense of cultural and national identity, but as an

essential part of life in the 21st century. All of this is captured in our mission statement:

*The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.*

*To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.*

## ***IB Learner Profile***

*from the IB Learner Profile Booklet published by the IB Organization, July, 2013:*

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. IB learners strive to be:

**Inquirers:** They nurture their curiosity, developing skills for inquiry and research. They know how to learn independently and with others. They learn with enthusiasm and sustain a love of learning throughout life.

**Knowledgeable:** They develop and use conceptual understanding, exploring knowledge across a range of disciplines. They engage with issues and ideas that have local and global significance.

**Thinkers:** They use critical and creative thinking skills to analyze and take responsible action on complex problems. They exercise initiative in making reasoned, ethical decisions.

**Communicators:** They express themselves confidently and creatively in more than one language and in many ways. They collaborate effectively, listening carefully to the perspectives of other individuals and groups.

**Principled:** They act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. They take responsibility for their actions and their consequences.

**Open-minded:** They critically appreciate their own cultures and personal histories, as well as the values and traditions of others. They seek and evaluate a range of points of view, and are willing to grow from the experience.

**Caring:** They show empathy, compassion and respect. They have a commitment to service, and act to make a positive difference in

the lives of others and in the world around them.

**Risk-takers / courageous:** They approach uncertainty with forethought and determination. They work independently and cooperatively to explore new ideas and innovative strategies. They are resourceful and resilient in the face of challenges and change.

**Balanced:** They understand the importance of balancing different aspects of their lives—intellectual, physical, (spiritual) and emotional—to achieve well-being for themselves and others. They recognize their interdependence with other people and with the world in which they live.

**Reflective:** They thoughtfully consider the world and their own ideas and experience. They work to understand their strengths and weaknesses in order to support their learning and personal development.

## **What makes IB at WKHS worthwhile?**

- **Well-rounded:** you will design a curriculum that is broad-based, promoting your ability to think and act effectively under many different circumstances
- **International-minded:** you will be challenged to consider the contributions of other cultures to the progress of human society -- and to understand how issues close to you can be affected by global influences and in turn have global significance
- **Interdisciplinary:** your teachers will strive to help you discover the connections between subject areas
- **Inquiry-based:** you will acquire knowledge primarily through the pursuit of answers to “real-world” questions and put that knowledge to work solving “real-world” problems
- **Student-directed:** often, you and other students will be required to initiate, design, and conduct the tasks that will lead to your learning
- **Collaborative:** you will often work together with other students to achieve your learning goals

## **What kinds of students will succeed in IB at WKHS?**

A student does not have to be “a genius” or in any official way identified as “gifted” to qualify to participate in IB at WKHS. There are admissions requirements listed on the next page, but none of these specify that a student must be identified as “gifted.” The keys to success are:

- **Ambition:** because this is a comprehensive program that requires students to complete a lot of work over the course of two years
- **Commitment:** because the program will consume five to seven



of a student’s eight periods during the school day, and will require a lot of work to be done outside the school day, as well

- **Courage:** because the program is academically challenging, intellectually rigorous, and it requires students to take on a lot of responsibility for their own learning
- **Determination:** because given the workload and long-term nature of the program, there will be moments when students will be tempted to give up
- **Organization:** because the workload will consist of short-term and long-term assignments, and the ability to plan and space out work will be helpful, if not essential

Students who possess these traits coming into the program are likely to be successful. Structures are built into the program to assist students who require more individualized instruction. A lack of “giftedness” should not be a barrier to successful participation.

### *Options available to IB at WKHS Students*

**Students and parents should be advised that in order to earn college credit for IB courses, they must complete the IB subject exams. Registration for IB subject exams require students to pay fees to the IB Organization. These fees cover the administration and grading of the exams. Students and their parents will be required to pay the necessary fees for the student’s first two IB exams (approximately \$300 for one exam, \$410 for two exams); the Worthington City School District will pay the subject fees for any additional IB exams.**

#### **Option #1: IB DIPLOMA PROGRAMME STUDENT**

This option is for the student who wishes to be a candidate to earn the Diploma of the International Baccalaureate. He/she must enroll in six subject courses, one from each of the following groups:

IB Diploma Programme Subject Groups	Courses available at WKHS
Group 1 Studies in Language & Literature	English Literature HL
Group 2 Language Acquisition	French HL; Latin SL; Spanish HL
Group 3 Individuals and Societies	History SL/HL Psychology SL
Group 4 Experimental Sciences	Biology SL
Group 5 Mathematics	Mathematics SL Math Studies SL

IB Diploma Programme Subject Groups	Courses available at WKHS
Group 6 The Arts and Other Electives	Business Management SL or HL or a second course from any other group

A “Standard Level” (SL) course includes less content than a “Higher Level” (HL) course, and may be taught over a shorter period than an HL course. All HL courses are two years long, while an SL course may range from one to two years.

To earn the Diploma of the International Baccalaureate, a student must successfully complete the exams for one course in each of the six Subject Groups (a total of six IB Subject courses). The student must also take at least three and no more than four Higher Level (HL) courses.

Additionally, a student who wants to earn the Diploma of the International Baccalaureate must complete:

- **Theory of Knowledge:** a course which explores the nature of knowledge; it asks questions like “How do we know something is real / true?” and “How do our standards for truth differ from discipline to discipline?” In order to complete this course, students must write a 1,200-1,600 word essay to be graded externally and make an in-class presentation. Additional coursework will be assigned by the teacher.
- **Extended Essay:** a work of original research on a specific topic of personal interest to the student. The student must write this 4,000-word essay and submit it for external grading.
- **Creativity-Activity-Service:** a series of experiences that take a student’s learning outside the classroom and into the community; students must make a sustained effort over a period of 18 months to engage their creative talents, engage in physical activity, engage in community service, initiate their own project, and reflect upon the growth that they achieve.

#### **Option #2: Partial Program Student**

This option provides students who decide not to pursue the full IB diploma (Option #1) with the ability to engage with the IB at WKHS learning community in a substantial way. The WKHS IB staff believes engaging with IB coursework and the IB Core (Theory of Knowledge, the Extended Essay, and Creativity, Activity, Service) is valuable to all students willing to undertake the challenge.

Partial program students enroll in at least two IB subject courses. At least one of these courses must be a two-year course. Partial program students must also enroll in Theory of Knowledge and complete either the Extended Essay or Creativity, Activity, Service.

Students completing the partial program option will not be eligible to earn the IB diploma. However, like all IB students, they may register for IB exams and potentially earn college credit for their work.

**Option #3: IB COURSE STUDENTS**

Students who meet the prerequisites may register for individual IB courses. These students may not register for the IB Core components (Theory of Knowledge, the Extended Essay, and Creativity, Activity, Service). However, course students may register for IB exams and potentially earn college credit for their work. This is the best option for students who are not prepared to make a substantial commitment to IB but who still want to challenge themselves with IB coursework.

Please note that the cost to register for one IB exam is about \$300. Students may take IB courses without registering for IB exams, but such students must still complete all IB coursework, including internal assessments, papers written in class for external assessment, and practice/mock exams.

***Admissions Policy***

To be admitted as an IB Diploma Programme Student or Student, a student . . .

1. Must have an cumulative GPA of 2.5 or above after three semesters
2. Earn a cumulative passing score of 18 points on seven end-of-course state tests. See page 5.
3. Must have earned a passing grade for both semesters of ELA I or Honors ELA I and the first semester of Honors ELA II or ELA III.
4. Must have earned a passing grade for both semesters of a Level 2 course (standard or Honors) in French or Spanish or the Level 1 course in Latin and for the first semester of a Level 3 course (standard or Honors) in French or Spanish or the Level 2 course in Latin
5. Must have earned passing grades in both semesters of Modern World History and the first semester of U. S. History or AP U. S. History
6. Must have earned passing grades in both semesters of Physical Science (standard or Honors) and the first semester of Biology (standard or Honors)
7. Must have earned passing grades in both semesters of Math 2 (standard or Honors) and the first semester of Math 3 (standard or Honors)

**Listing of International Baccalaureate Course Offerings**

**GROUP 1: STUDIES IN LANGUAGE AND LITERATURE**

IB English Literature HL

**GROUP 2: LANGUAGE ACQUISITION**

IB French HL  
 IB Latin SL  
 IB Spanish HL

**GROUP 3: INDIVIDUALS AND SOCIETIES**

IB History SL, HL  
 IB Psychology SL

**GROUP 4: EXPERIMENTAL SCIENCES**

IB Biology

**GROUP 5: MATHEMATICS**

IB Mathematics SL  
 IB Math Studies SL

**GROUP 6: THE ARTS AND OTHER ELECTIVES**

IB Business Management SL/HL

**IB at WKHS**

IB Theory of Knowledge and Advisory

***Group 1 Studies in Language & Literature***

**IB ENGLISH LITERATURE HL**

4 semesters	Grades: 11, 12(R)
2.0 credits	Fulfills IB Group 1 requirement
	Prerequisite: ELA2
	Recommendation: Honors ELA II
(Fulfills 2 English Cr. required for graduation)	Graded: Weighted

From the Language A: Literature Guide published by the International Baccalaureate Organization, February 2011: The course is built on the assumption that literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature can therefore be seen as an exploration of the way it represents the complex pursuits, anxieties, joys and fears to which human beings are exposed in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity, and provides opportunities for encouraging independent, original, critical and clear thinking. It also promotes respect for the imagination and a perceptive approach to the understanding and interpretation of literary works.

Through the study of a wide range of literature, the Language A: Literature course encourages students to appreciate the artistry of literature and to develop an ability to reflect criti-

cally on their reading. Works are studied in their literary and cultural contexts, through close study of individual texts and passages, and by considering a range of critical approaches. In view of the international nature of the IB and its commitment to intercultural understanding, the Language A: Literature course does not limit the study of works to the products of one culture or the cultures covered by any one language. The study of works in translation is especially important in introducing students, through literature, to other cultural perspectives. The response to the study of literature is through oral and written communication, thus enabling students to develop and refine their command of language.

## ***Group 2 Language Acquisition***

### **IB FRENCH HL**

4 semesters  
2.0 credits

Grades: 11, 12  
Prerequisite: Successful completion of French 2 & 3 or Honors 2 & 3  
Graded: Conventional, Weighted

This is a 2-year program that is designed as a culmination of students' French studies. Every effort will be made to conduct the class exclusively in French and students likewise are expected to communicate in French. Students will work on improving their ability to communicate in French by focusing on the four language skills of speaking, reading, writing and listening. Furthermore, students will study grammar and vocabulary in order to improve their ability to communicate across a wide variety of topics. The courses will focus on 5 of the 8 themes described in the IB Course Handbook: Communication and Media, Global Issues, Social Relationships, Cultural diversity, Customs and Traditions, Health, Leisure, Science and Technology. Students will develop their linguistic abilities through the development of receptive (understanding audio, audiovisual, written and print materials), productive (giving oral presentations and writing a variety of texts) and interactive skills (spontaneous exchange of ideas).

Materials will extend from everyday oral exchanges to literary texts, and will be directly related to the culture of French speaking countries in order to develop students' intercultural understanding. Classroom activities will make a point to dismantle cultural stereotypes in order to create an awareness and appreciation of the different perspectives of people from other cultures.

### **IB SPANISH HL**

4 semesters  
2.0 credits

Grades: 11, 12  
Fulfills IB Group 2 requirement;  
Prerequisite: Spanish 3  
Graded: Conventional, Weighted

This is a 2-year program that is designed as a culmination of a student's Spanish studies. Every effort will be made to conduct the class exclusively in Spanish and students likewise are

expected to communicate in Spanish. Students will work on improving their ability to communicate in Spanish by focusing on the four language skills of speaking, listening, reading and writing. Furthermore, students will study grammar and vocabulary in order to improve their ability to communicate across a wide variety of topics. Over the course of the two years the focus will be based on three core themes: Social Relationships, Communication and Media, and Global Issues. In addition, other optional themes will include Leisure Activities, Cultural Diversity, Science and Technology, Customs and Traditions and Health. Students will develop their linguistic abilities through the development of 3 communicative skills: receptive (understanding authentic audio, audiovisual, written and print materials), productive (giving oral presentations and writing a variety of texts) and interactive (spontaneous exchanges of ideas). Materials will range from everyday spoken interactions to literary texts and will be directly related to the culture of Spanish speaking countries in order to develop students' intercultural understanding. Classroom activities will make a point to dismantle cultural stereotypes in order to create an awareness and appreciation of different perspectives of people from other cultures.

### **IB LATIN SL**

4 semesters  
2.0 credits

Grades: 11, 12  
Fulfills IB Group 2 requirement;  
Prerequisite: Latin 2  
Graded: Conventional, Weighted

Adapted from the Classical Languages Guide published by the International Baccalaureate Organization, May 2010: The Diploma Programme courses in Latin provides an opportunity for students to explore the language, literature and culture of ancient Rome. This ancient civilization has played a vital part in shaping many modern societies and cultures. The language itself is versatile and finely structured, and has had a major influence on the development of most modern European languages. The rich and varied literature of Rome has left its mark on almost every genre of modern writing. The study of Latin gives important insights into the culture that produced it, and offers a bridge between the contemporary world and the civilizations of antiquity. . . . Much contemporary thinking is still informed by the political, religious and legal principles of the Roman world, and the course includes a study of its historical development and wider cultural achievements. In the classical languages it is a fundamental principle that the texts should be studied in the original language. Linguistic skills lie at the heart of the course, since it is through a visceral understanding of the workings of a language that true intellectual contact can be made with the peoples of the past. In order to broaden students' knowledge of Latin literature, students will study some works in translation, but the foundation remains linguistic. It is intended that through studying Latin in its cultural context, students will see that culture and language are symbiotic, and that they shape one another.

***Group 3 Individuals and Societies***

**IB HISTORY SL/HL**

Grades: 11, 12  
 SL=3 semesters, 1.5 credits Fulfills IB Group 3 req;  
 HL=4 semesters, 2.0 credits Prerequisite: Successful  
 Completion of Modern World History &  
 American History or AP American History  
 Graded: Conventional, Weighted

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources. It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present. It is an exploratory subject that poses questions without providing definitive answers. It involves the selection and interpretation of data and critical evaluation of it. Students of history should appreciate the relative nature of historical knowledge and understanding, as each generation reflects its own world and preoccupations and as more evidence emerges. A study of history both requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts.

A working knowledge of European history is the essential point of entry into a study of World History because it introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of ideas and institutions that shaped the 20th and 21st Century world.

The theme of our IB History course is "Conflict within and among societies." The course examines the causes of conflict, ways it can be resolved short of resorting to violence/war, and the reasons and consequences for the failure to avoid violence/war.

Year One begins with an examination of the discipline of history and the work of historians. The major units of study for Year One are: The French Revolution and Napoleon; the First World War; and German/Italian Aggression leading to the Second World War.

Year Two begins with the completion of the Historical Investigation, a work of independent historical research, thinking, and writing. The major units of study for Year Two are: two civil wars – China and Spain; Japanese aggression in east Asia and the Pacific; the Second World War; the Cold War. Students will read and extract evidence from works by historians representing multiple historical perspectives and write essays reflecting their own historical thinking.

**IB PSYCHOLOGY SL**

Grades: 11, 12  
 2 Semesters Fulfills IB Group 3 req;  
 1.0 Credits Prerequisite: None  
 Graded: Conventional, Weighted

The IB Diploma Program Psychology course is the systematic study of behavior and mental processes. Students undertaking the course can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behavior. The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behavior and mental processes. The ethical concerns raised by the methodology and application of psychological research are also key considerations of the IB psychology course (IBO, 2015).

***Group 4 Experimental Sciences***

**IB BIOLOGY SL**

Grades: 11, 12  
 2 semesters Fulfills IB Group 4 requirement;  
 1.0 credits Prerequisite: Physical Science & Biology  
 (Fulfills 1.0 Science Graded: Conventional, Weighted  
 credits required for graduation)

The IB Diploma Program biology standard level course covers the relationship of the structure and function at all levels of complexity. Students learn about cell theory, the chemistry of living things, plant structure and growth, and the difference between genes and alleles, among many other topics, to further their understanding of and learning about biology. Throughout this challenging course, students become aware of how scientists work and communicate with each other. Further, students enjoy multiple opportunities for scientific study and creative inquiry within a global context.

***Group 5 Mathematics***

**IB MATHEMATICS SL**

Grades: 11, 12  
 4 semesters Fulfills IB Group 5 requirement,  
 2.0 credits Prerequisite: Math 3  
 (Fulfills 2.0 Mathematics credits Graded: Conventional,  
 for graduation) Weighted

Adapted from the Mathematics SL Guide published by the International Baccalaureate Organization, September 2006: This course caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply mathematical techniques correctly.

This course will provide a sound mathematical background as they prepare for future studies in subjects such as chemistry, engineering, economics, and business administration. The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way. Students should wherever possible apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context. The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. The portfolio also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

**IB MATH STUDIES SL**

Grades: 11, 12  
 2 semesters Fulfills IB Group 5 requirement,  
 1.0 credits Prerequisite: Math 3  
 (Fulfills 1.0 Mathematics credits Graded: Conventional,  
 for graduation) Weighted

Adapted from the Math Studies SL Guide published by the International Baccalaureate Organization, March 2012: This course is organized and structured with the following tenets in mind: placing more emphasis on student understanding of fundamental concepts than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing students' mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively. The course includes project work, a feature unique to mathematical studies SL within group 5. Each student completes a project, based on their own research; this is guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical study of their choice using their own experience, knowledge and skills acquired during the course. This process allows students to take sole responsibility for a part of their studies in mathematics. The students most likely to select this course are those whose main interests lie outside the field of mathematics. All parts of the syllabus have therefore been carefully selected to ensure that an approach starting from first principles can be used. As a consequence, students can use their own inherent, logical thinking skills and do not need to rely on standard algorithms and remembered formulae. Students likely to need mathematics for the achievement of further qualifications should be advised to consider an alternative mathematics course.

**Group 6 The Arts & Other Electives**

**IB BUSINESS MANAGEMENT SL OR HL**

Grades: 11 and/or 12  
 2 semesters (SL)/ Fulfills IB Group 6 requirement,  
 4 semesters (HL) Prerequisite: None  
 1.0 credits (SL)/ Graded: Conventional, Weighted  
 2.0 credits (HL)

IB Business Management is a one or two year course. It is a rigorous and thorough study of business activities and decision-making processes. The course includes:

- An in-depth study of five topics:
  - Topic 1: Business Organizations and Environment
  - Topic 2: Human Resources
  - Topic 3: Accounts and Finance
  - Topic 4: Marketing
  - Topic 5: Operations Management
- Group collaboration to further understand the business tools and theories
- A comprehensive research project dedicated to a local or international corporation
- Demonstration of communication abilities through projects and presentations
- Inquiry of business concepts - change, culture, ethics, globalization, innovation, and strategy
- Potential of receiving college credit

**IB at WKHS  
 (IB Diploma Requirement)**

**IB THEORY OF KNOWLEDGE**

Grades: 11, 12  
 3 semesters Fulfills IB Diploma  
 Meets 2 days per week semester 1,  
 4 days per week semester 2,  
 and 2 days per week semester 3

Elective credit Candidate or  
 partial program requirement  
 Prerequisite: Must be IB Diploma student or partial program student  
 Graded: Conventional, Weighted

From the Theory of Knowledge Guide published by the International Baccalaureate Organization, November 2008:

The TOK course, a flagship element in the Diploma Programme, encourages critical thinking about knowledge itself, to try to help young people make sense of what they encounter. Its core content is questions like these: What counts as knowledge? How does it grow? What are its limits? Who owns knowledge? What is the value of knowledge? What are the implications of having, or not having, knowledge? . . .

The aims of the TOK course are to:

- develop a fascination with the richness of knowledge as a human endeavour, and an understanding of the empowerment that follows from reflecting upon it

- develop an awareness of how knowledge is constructed, critically examined, evaluated and renewed, by communities and individuals
- encourage students to reflect on their experiences as learners, in everyday life and in the Diploma Programme, and to make connections between academic disciplines and between thoughts, feelings and actions
- encourage an interest in the diversity of ways of thinking and ways of living of individuals and communities, and an awareness of personal and ideological assumptions, including participants' own encourage consideration of the responsibilities originating from the relationship between knowledge, the community and the individual as citizen of the world.

Having followed the TOK course, students should be able to:

- analyze critically knowledge claims, their underlying assumptions and their implications
- generate questions, explanations, conjectures, hypotheses, alternative ideas and possible solutions in response to knowledge issues concerning areas of knowledge, ways of knowing and students' own experience as learners
- demonstrate an understanding of different perspectives on knowledge issues
- draw links and make effective comparisons between different approaches to knowledge issues that derive from areas of knowledge, ways of knowing, theoretical positions and cultural values
- demonstrate an ability to give a personal, self-aware response to a knowledge issue
- formulate and communicate ideas clearly with due regard for accuracy and academic honesty.

## NON-DEPARTMENT ELECTIVES

### STUDENT LIBRARY AIDE TRAINING

1 Semester  
Not for credit

Grades: 9, 10, 11, 12  
Prerequisite: Librarian's approval  
Graded: pass/fail

Working as a library aide enables students to learn the skills and routines involved in using and running a library. They will help fellow students, teachers and librarians while having a "hands-on" work experience which may be of use to them in future years. This course may be repeated several times; responsibilities will increase with experience. Evaluation is based on student's performance of assigned tasks.

### STUDENT OFFICE AIDE

1 Semester  
Not for credit

Grades: 9, 10, 11, 12  
Prerequisite: None  
Graded: pass/fail

Working as an office aide gives students first-hand knowledge of the various aspects involved in the running of a high school office and in dealing with teachers, parents and students. Duties vary

depending on the office assigned and individual student abilities. Examples of student responsibilities are as follows: delivering and sorting mail, relaying messages to staff and students, receiving guests, running passes, special projects such as stapling and collating materials. The course may be repeated several times, and responsibilities will increase with experience. Evaluation will be based on daily performance of tasks, attitudes, and behavior.

### STUDENT TEACHER AIDE

1 Semester  
Not for credit

Grades: 9,10,11,12  
Prerequisite: Teacher permission  
Graded: pass/fail

Working as a teacher aide gives students first-hand knowledge of the various aspects involved in teaching a class. Students will be asked to assist the teacher in preparation for class. Duties vary depending on the type of class taught and the individual student's abilities. Examples of student responsibilities are as follows: helping the teacher set up for class, running errands within the building, and working on special projects such as stapling and collating materials.

This course may be repeated several times; responsibilities will increase with experience. Evaluation will be based on daily performance of tasks, attitudes, and behavior.

### GLOBAL SCHOLARS I

2 Semesters  
1/2 credit

Grades: 9, 10, 11, 12  
Prerequisite: None  
Graded: Conventional

Global competency is having the knowledge, skills, and mind-set to thrive in our global society. The Global Scholars Program is a four-year program in which students pursue a path of learning that focuses on developing these skills. Students will receive a credential that recognizes global competency above and beyond the required curriculum at Worthington City Schools by meeting the following requirements:

- Complete required blended learning (face-to-face and online) courses through Worthington City Schools all four years;
- Earn digital badges through four domains of global competencies;
- Attend face-to-face sessions;
- Explore the world through online, self-paced modules;
- Conduct a capstone focusing on action research or a service-learning project with opportunities to explore the world through international travel or mentorship in a global business setting.

# DEPARTMENT COURSE OFFERINGS

## BUSINESS DEPARTMENT

Business is by far the number one college major. About 15% of all college graduates have a business-related major and over 40% of all college graduates choose a business career following graduation. The goals of the Business Department are to provide students with activities which:

- develop business skills that apply to their personal lives as well as to their careers.
- teach and reinforce technology skills that prepare them for a technological world
- explore a variety of career opportunities, and
- assist them in developing a personal work ethic

### COURSES OFFERED

Grade	Course #	Course Title	Credits
10, 11, 12	5110	Accounting 1	1/2
9, 10, 11, 12	5211	Keyboarding & Computer Skills	1/2
10, 11, 12	5030	Personal Financial Management	1/2
10, 11, 12	5310	Introduction to Business	1/2
9, 10, 11, 12	5360	Law 1	1/2
10, 11, 12	5370	Law 2	1/2
11, 12	5371	IB Business Mgmt. SL	1
11, 12	5381	IB Business Mgmt. HL Y1	1
12	5382	IB Business Mgmt. HL Y2	1

### ACCOUNTING 1

1 Semester  
1/2 Credit

Grades: 10, 11, 12  
Prerequisite: None  
Graded: Conventional

This course is designed to provide students with a basic understanding of accounting principles and procedures including analysis of business transactions, journalizing, posting, adjusting and closing entries, and financial statement preparation. This class presents basic information needed in a college accounting course. Also included are transactions involving payroll accounting, bank accounts, and cash funds.

### KEYBOARDING & COMPUTER SKILLS

1 Semester  
1/2 Credit

Grades: 9, 10, 11, 12  
Prerequisite: None  
Graded: Conventional or pass/fail

Everyone should take this class! For students planning to attend college, keyboarding/computer skills are essential. Few college professors accept handwritten work. These skills are also important for students who pursue other career ventures. Every career requires some degree of keyboarding/computer skills

with reasonable speed, accuracy, and basic program expertise. Students in this course also study Word, Excel, and Access. All work is completed in class.

### PERSONAL FINANCIAL MANAGEMENT

1 Semester  
1/2 Credit

Grades: 10, 11, 12  
Prerequisite: None  
Graded: Conventional

Discover the secrets of the wealthy so you can make your MONEY work for you. This is a class for young adults who want to control their financial future. Practical money survival skills will be taught leading to success facing financial opportunities, responsibilities, and challenges. Students will gain an understanding of basic terminology and attitudes that lead to personal financial well-being. The course will also increase your decision-making, goal setting and planning capabilities in money matters that young adults face. Learn how to keep more of the money you earn. We will cover: career exploration, saving for college, using a checking account and debit card, credit and credit cards, savings and investing, insurance, taxes, budgeting, consumer awareness, renting an apartment versus buying a house, meal planning, decision-making, and buying versus leasing a car, among other topics, through hands-on activities and guest speakers.

You will even have a chance to try your hand at investing by playing an online stock market game. Throughout the semester, you will use Virtual Business®, a computer simulation, to see how well you manage your virtual finances. This course fulfills the state mandate for financial literacy.

### INTRODUCTION TO BUSINESS

1 Semester  
1/2 Credit

Grades: 10, 11, 12  
Prerequisite: None  
Graded: Conventional

Thinking about majoring in business in college or owning your own business? This course is a must for college-bound students considering a career in business or a related field. Introduction to Business explores areas such as Management, Human Resources, Economics, Marketing, Sales and International Business. Many hands-on activities reinforce concepts learned. Students, using a computer simulation, operate a virtual business during most of the course. The final project involves operating an actual business. This is a good foundation course for students considering IB Business Management their junior or senior year. This course is eligible for college plus credit.

**LAW 1**

1 Semester  
1/2 Credit

Grades: 9, 10, 11, 12  
Prerequisites: None  
Graded: Conventional

Are you interested in finding out how the law affects you? Have you ever wondered what it would be like to be an attorney or a witness, or to actually try a case in court? If so, then Law 1 is the course for you! Law 1 focuses on civil law, as well as juvenile law. Law 1 provides students with interesting information that affects them. Students learn about the legal system by studying the civil trial process, and by participating in several mock trials throughout the semester. Students take a field trip to the Franklin County Courthouse to watch cases being tried. During the course of the semester, students also take a tour of the Franklin County Jail, and study torts (which are a type of lawsuit). Speakers including attorneys, police officers, and judges, are invited to class to share their expertise.

**LAW 2**

1 semester  
1/2 Credit

Grades: 10, 11, 12  
Prerequisite: Law 1  
Graded: Conventional

Are you ready to learn about the criminal justice system? Law 2 continues to explore legal issues by studying criminal law, with an emphasis on search and seizure, as well as contract law. Students will also learn about the appeals process by taking a field trip to the Ohio Supreme Court. In addition, students role play important constitutional issues through mock trials and mock Appellate Court Hearings. Speakers, including criminal defense attorneys, district attorneys, and police officers share their knowledge and experiences with the students.

**IB BUSINESS MANAGEMENT SL OR HL**

2 semesters (SL)/  
4 semesters (HL)  
1.0 credits (SL)/  
2.0 credits (HL)

Grades: 11 and/or 12  
Fulfills IB Group 6 requirement,  
Prerequisite: None  
Graded: Conventional, Weighted

IB Business Management is a one or two year course. It is a rigorous and thorough study of business activities and decision-making processes. The course includes:

- An in-depth study of five topics:  
Topic 1: Business Organizations and Environment  
Topic 2: Human Resources  
Topic 3: Accounts and Finance  
Topic 4: Marketing  
Topic 5: Operations Management
- Group collaboration to further understand the business tools and theories

- A comprehensive research project dedicated to a local or international corporation
- Demonstration of communication abilities through projects and presentations
- Inquiry of business concepts - change, culture, ethics, globalization, innovation, and strategy
- Potential of receiving college credit

**ENGLISH DEPARTMENT**

All Worthington Kilbourne students are required to complete at least four units of credit in English. The electives, apart from the prerequisites dictated by content sequence, generally permit greater freedom of decision by the student. All courses offered by the English Department are considered to be composition and reading courses; therefore, writing and reading skills are taught in every English course. Students should expect to read and write frequently whenever they are enrolled in an English course.

A college preparatory course of study should contain courses that help students develop a command of language, grammar and mechanics, sentence structure, paragraph structure, and essay organization. These skills should be developed through reading, writing, and speaking. The reading experiences should concentrate on an analysis of the various elements of literature such as character, theme, plot, imagery, symbolism, point of view, and style. Students should study significant works of both American and world literature. The writing experiences should help students develop logical thinking and organization with additional emphasis on mechanics, word choice, and standard English.

The English Department offers a variety of courses that help students satisfy their individual needs. For a more specific course of study for a particular college, students should contact that college for its requirements. Parents who have additional questions are invited to call their child's English teacher or the English Department Chair.

**Course Options**

<b>9th</b>	<b>0002</b> <b>0003</b>	ELA I or Honors ELA I
<b>10th</b>	<b>0005</b> <b>0008</b> <b>0006</b>	ELA II or ELA II + Biology or Honors ELA II
<b>11th</b>	<b>0009</b> <b>0470</b> <b>0601</b>	*ELA III AP Language and Composition IB English Literature HL Y1
<b>12th</b>	<b>0470</b> <b>0480</b> <b>0602</b> <b>0880</b> <b>1221</b>	*AP Language and Composition or AP Literature and Composition or IB English Literature HL Y2 *Contemporary Voices IB Film (not NCAA approved)

\* offered as a blended learning course

OR

Seniors choose one semester course from each list



	A		B
0380	Great Books	0240	Senior Composition
		0230	Advanced Composition
0425	Cultural Studies	0720	Introduction to Journalism
0390	*Science Fiction	0770	Advanced Journalism (School newspaper, repeatable)
		0261	Creative Writing & Publishing
0830	Reading Lab (Repeatable) (This course will count one time as a 1/2 credit towards the English Graduation Requirement.)	1202	Communications Technology *(not NCAA approved)
		1203	WKHS News/ Advanced Comm. Technology *(not NCAA approved, repeatable)

**Electives Courses**

0230	Advanced Composition (ELA II is a prerequisite)	11
0240	Senior Composition (ELA II is a prerequisite)	11
0770	Advanced Journalism (school newspaper, repeatable)	9-11
1203	WKHS News/Advanced Communications Technology (not NCAA approved, repeatable)	9-11
0890	Applied English	9-12
1202	Communications Technology (not NCAA approved, repeatable)	9-11
0880	*Contemporary Voices	11
0261	Creative Writing & Publishing	11
0425	Cultural Studies	11
0460	Etymology	9-12
0380	Great Books	11
0720	Introduction to Journalism	9-11
0830	Reading Lab (repeatable)	9-12
0390	*Science Fiction	11
0780	Yearbook	9-12

\* offered as a blended learning course

**ADVANCED COMPOSITION**

1 Semester  
1/2 Credit

Grades: 11, 12  
Prerequisite: None  
Graded: Conventional

Advanced Composition is a semester-long student-centered course emphasizing individual development as a writer. The course emphasizes the writing process from the beginning thought processes to the final writing of the complete composition. With discussion of significant ideas and mentor texts as the stimulant, students will complete various assignments such as arguments with sources, analysis and timed writing. Modes of expression include essays, research papers, and multi-media presentations. Collecting, evaluating, and organizing evidence to develop valid conclusions is stressed, as well as command of the conventions of Standard Written English.

**ADVANCED PLACEMENT ENGLISH:  
LANGUAGE AND COMPOSITION**

2 Semesters  
1 Credit

Grades: 11, 12  
Prerequisites: None  
Recommend Honors ELA II  
Graded: Conventional, weighted

Advanced Placement English Language and Composition is a year-long college-level course studying the art of language. Designed in accordance with the guidelines described in the AP English Language Course Description, this course embraces two overall purposes. The main purpose is to help students learn about the use of language to communicate, both as readers and as writers. The second purpose is to prepare students to perform as well as possible on the AP Language and Composition test. The AP Language and Composition course concentrates mostly on rhetorical analysis of non-fiction—specifically the study of the relationships among readers, writers, their purposes, and subjects. This study of rhetoric provokes a heightened consciousness of the students' reading and writing processes through a variety of reading and writing assignments. To enhance the students' use of language and their ability to analyze its effective use, timed writings, challenging multiple choice tests, formal papers, research, discussion, and other instructional and evaluative procedures recommended by the College Board are used. This course is also offered as a blended learning course.

**ADVANCED PLACEMENT ENGLISH:  
LITERATURE AND COMPOSITION**

2 Semesters  
1 Credit

Grade: 12  
Prerequisite: None  
Recommend Honors ELA II  
Graded: Conventional, weighted

Advanced Placement English Literature and Composition provides a year-long college-level English course for twelfth grade students who want a challenging and stimulating course as well as preparation for the official AP examination. Students should expect intensive and extensive reading to include fiction, poetry,

drama, and literary criticism, reflecting on this reading through both class discussion and composition. Writing assignments emphasize analytical skills through development of critical arguments through extensive reading journals, in-class timed essays, and formal essays that incorporate an extended writing process as well as research.

### COMMUNICATION TECHNOLOGY

1 Semester  
1/2 Credit - English or  
Technology Education

Grades: 9,10,11, 12  
Prerequisite: None  
Graded: Conventional

Comm Tech is a study of media and its effect on our society. It is project and writing-based. Approximately four projects are created in a semester. Students will gain experience in working digital camcorders and editing with Adobe Premiere Pro CS6. They will create public service announcements, broadcast news packages and a music video. Each project will have a writing component.

### WKHS NEWS/ADVANCED COMMUNICATION TECHNOLOGY I

1 Semester  
1/2 Credit - English or  
Technology Education  
Repeatable

Grades: 9,10,11,12  
Prerequisite: Comm. Technology;  
Video teacher's  
recommendation or audition  
Graded: Conventional

WKHS News continues to use the project and writing-based format of Comm. Tech. The students in the class produce a news program which airs Fridays and is published at weebly.com. Students gain valuable lessons in oral and written communication as they also experience more advanced knowledge of the Adobe Creative Package of Adobe Premiere Pro, After Effects, and Audition. Associated Press style of broadcast news guidelines are stressed along with valuable time management lessons. Students study documentaries to gain experience to enhance primary and secondary source investigations. Local professionals are invited in to give their perspectives of career opportunities. Advanced Comm Tech can be taken multiple times for credit.

### CONTEMPORARY VOICES

2 Semesters  
1 Credit

Grades: 11, 12  
Prerequisite: cc ELA III, or  
AP Language  
Graded: Conventional

Contemporary Voices is a year-long course that acquaints students with the authors, literature, and media of current times and includes voices of diverse cultures and genders. The format of the course in both content and structure is designed to create lifetime learners. Students will read both assigned and self-selected texts, including informational, technical, persuasive, literary, and electronic texts. Literary texts will include both fiction and nonfiction. Students examine through research, writing, and discussion works in the traditional and emerging canons of literature, film, and other media. Active participation

in discussions is an integral part of the course. Skills are taught in the top band of the Ohio Revised Standards. This course is also offered as a blended learning course.

### CREATIVE WRITING & PUBLISHING

1 Semester  
1/2 Credit

Grades: 11, 12  
Prerequisite: None  
Graded: Conventional

Creative writing is a course for those students who wish to express themselves imaginatively in various literary forms. The course concentrates on sharpening students' awareness of themselves and their environment, developing writing skills, and promoting confident writers. Preparatory assignments using figures of speech, imagery, devices of sound, meter, characterization, point of view, setting, plot, and other fundamentals of specific literary forms prepare students for successful completion of personal essays, short stories, poems, and one-act plays. Individual final projects allow students to pursue the genre they most enjoy and to show proficiency in writing.

### ENGLISH LANGUAGE ARTS I

2 Semesters  
1 Credit

Grade: 9  
Prerequisite: None  
Graded: Conventional

English Language Arts I is a year-long course which offers a foundation for the other courses in the English curriculum. Students learn the basic elements of both composition and literature. Instruction in composition emphasizes the writing process, including grammar and usage, sentence structure, the paragraph, and multi-paragraph writing. Basic elements of literature such as theme, plot, character and setting are emphasized, as well as literary techniques and styles used by various authors. The study of literature includes short stories, plays, novels, and poetry. The study of Informational Texts includes technical writing, literary nonfiction, and Seminal US Documents. Research techniques are emphasized with the ability to evaluate intricate arguments and credibility of the source. Students will participate in structured conversations—whole class, small groups, or with a partner—and use technology to present research.

### HONORS ENGLISH LANGUAGE ARTS I

2 Semesters  
1 Credit

Grade: 9  
Prerequisite: Teacher recommendation  
Graded: Conventional

Honors English Language Arts I is year-long course of enriched and integrated English Language Arts Curriculum. Students build upon the basic elements of both composition and literature. Instruction in composition emphasizes the writing process, including grammar and usage, sentence structure, the paragraph, and multi-paragraph writing. Elements of literature such as theme, plot character and setting are emphasized and enriched, as well as literary techniques and styles used by various authors. The study of literature includes short stories, plays, novels, and poetry. The study of Informational Texts includes technical writing, literary nonfiction, and Seminal US Docu-

ments. Students interrogate text to determine main idea, point of view, cite evidence, make inferences from text, and comprehend complex texts from a variety of genres including informational text, literary nonfiction, poetry, short stories, plays, and novels. Integration of strands enables students to utilize mentor texts to expand skills in grammar and structure, producing clear and coherent writing that is developed, organized, and appropriate for the intended purpose and audience. Students have frequent opportunities to present their writing through discussion and utilization of technology

**ENGLISH LANGUAGE ARTS II**

Grade:10  
 2 Semesters Prerequisite: ELA I or  
 1 Credit Honors ELA I  
 Graded: Conventional

English Language Arts II is a year-long course that builds upon the foundational skills acquired in English I. Students extend their learning of both composition and literature. Instruction in composition emphasizes the writing process, including grammar and usage, sentence structure, the paragraph, and multi-paragraph writing. Elements of literature such as theme, plot, character, and setting are emphasized, as well as literary techniques and styles used as by various authors. The study of literature includes short stories, plays, novels, and poetry. The study of Informational Texts includes technical writing, literary nonfiction, and Seminal US Documents. Research techniques are emphasized with the ability to evaluate intricate arguments and credibility of the source. Students will participate in structured conversations—whole class, small groups or with a partner—and use technology to present research.

**HONORS ENGLISH LANGUAGE ARTS II**

Grade:10  
 2 Semesters Prerequisite: Teacher Recommendation  
 1 Credit Graded: Conventional

Honors ELA II is a year-long course which provides for a second year of enriched and integrated Common Core English Language Arts Curriculum, building upon the foundational skills acquired in Honors ELA I. Students extend their learning into the 11th and 12th grade Ohio Revised Standards Continuum through integration of the strands in Reading Literature, Reading Informational Text, Writing, Language, and Speaking and Listening. Reading material focuses on the development of American literature from the colonial period to the contemporary emerging canon. Students interrogate text to determine main idea, point of view, cite evidence, make inferences from text, and comprehend complex texts from a variety of genres including informational text, literary nonfiction, poetry, short stories, plays, and novels. Integration of strands enables students to utilize mentor texts to expand skills in grammar and structure, producing clear and coherent writing that is developed, organized, and appropriate for the intended purpose and audience. Students have frequent opportunities to present their writing through discussion and utilization of technology. The course includes preparation for formal test events and the transition into Advanced Placement or IB English courses.

**ENGLISH LANGUAGE ARTS II+ BIOLOGY**

Grade:10  
 2 Semesters Prerequisite: Teacher Recommendation  
 1 Credit Science and Graded: Conventional  
 1 Credit English

ELA II + Biology connection, a year-long course, is designed to integrate both the English Language Arts and Science Curriculum. ELA Ohio Revised Standards integrate strands of Reading Literature, Reading Informational Text, Writing, Language, and Speaking and Listening. Students build upon the foundational skills acquired in ELA I. This course investigates the composition, diversity, complexity and interconnectedness of life on Earth. Fundamental concepts of heredity and evolution provide a framework through inquiry-based instruction to explore the living world, the physical environment, and the interactions within and between them. Students engage in investigations to understand and explain the behavior of living things in a variety of scenarios that incorporate scientific reasoning, analysis, communication skills, and real-world applications. Students build skills in grammar and structure in producing clear and coherent writing that is developed, organized, and appropriate to the intended purpose and audience with frequent opportunities to present their writing through discussion and presentation utilizing technology.

**ENGLISH LANGUAGE ARTS III**

Grade:11  
 2 Semesters Prerequisite: ELA II or  
 1 Credit English Honors ELA II  
 Graded: Conventional

English III is a year-long course that focuses on the development of American literature throughout history from the colonial period to the diversity of the contemporary emerging canon. Students continue to build on the integrated skills from previous courses, moving into the highest band in the Ohio Revised Standards. Reading material includes both whole-class and self-selected novels, as well as shorter texts incorporating a variety of literary and informational texts. Students write essays of analysis, a research paper, and informal responses to literature. Speaking and Listening skills are emphasized through both discussions and formal presentations. This course is also offered as a blended learning course.

**CULTURAL STUDIES**

Grade: 11, 12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional, weighted

Cultural Studies is a semester-long course that focuses on how the shared themes in multiple cultures shaped our past and impact our present and future. Students will read literature and be challenged to make relevant connections in and between the cultures studied in class. These themes will guide classroom discussion, student writing, and research. Students will write informational/explanatory texts, argument, narrative and other modes. To culminate the course, students will create an interactive, multimedia presentation and a research paper.

**ETYMOLOGY**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional

Etymology is a semester-long elective designed to examine the history and development of words and language and to enrich students' vocabulary. Students learn meanings and derivations of Greek and Latin roots and examine how words have changed through the centuries. Independent reading, research, and presentation skills integrate the skills from the various strands of the curriculum. The focus of the course is the development of strategies to analyze and understand new words as they are encountered in reading.

**GREAT BOOKS 1**

Grades: 11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional

Great Books is a semester-long course that emphasizes the reading of literature based on individual student choices from an extensive book list that includes both canonical and contemporary works in the 11th and 12th grade complexity bands. Students work to expand their skills through integration of the strands in Reading Literature, Reading Literary Nonfiction, Writing, Language, and Speaking and Listening. Writing assignments focus on responses to reading, incorporating both informal writings and formal, extended arguments. Students develop speaking and listening skills in both formal presentations and informal discussions of books and genres. The class serves primarily as a lab where students spend class time reading, writing, and conferencing.

**INTRO TO JOURNALISM**

Grades: 9, 10, 11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional

Introduction to Journalism is a semester-long course designed to provide a foundation in multiple forms of news media including documentary, television, radio, magazine, and newspaper. Students will learn and practice speaking and listening skills through interviews and broadcasts. Writing assignments include research and informative texts in the form of news articles, feature stories, sports news, and profile pieces, as well as argument texts in the form of reviews and editorials. Students will identify and evaluate an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text. Peer-editing others' writing improves command of the English language.

**ADVANCED JOURNALISM**

Grades: 9,10,11, 12)  
 1 Semester Prerequisite: Intro to Journalism or  
 1/2 Credit (repeatable) advisor recommendation  
 Graded: Conventional

Advanced Journalism is a semester-long repeatable course focused on publication of the school newspaper. This course is primarily intended to further develop and improve the writing and style of journalism students. Writing assignments include informative texts in the form of news articles, feature stories, sports news, and profile pieces with special emphasis on research and revising skills. Students will also complete argument texts in the form of satire, reviews, and editorials. Optional narrative and creative texts may be included as well. Students will also improve technology skills through the layout design for each page of an article, working as a team to brainstorm, assign topics and peer-editing student pieces prior to submission to the advisor.

**READING LAB**

Grades: 9,10,11,12  
 1 Semester Prerequisite: Teacher recommendation  
 1/2 Credit (repeatable) Graded: Conventional

Reading Lab is a semester-long course recommended for students who require additional scaffolding to read grade-level texts. In this course, students develop integrated, research-based literacy strategies through instruction and practice using a variety of informational and literary texts. Using these strategies students analyze literature and informational text to interpret and evaluate aspects of the work. Students engage in assigned reading, independent reading, response to reading, word study, and the use of technology to reinforce close reading skills needed for college and career readiness. This course may be repeated with teacher recommendation.

**SCIENCE FICTION**

Grades: 11, 12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional

Science Fiction is a semester-long course that emphasizes speculative fiction, developing ways to understand complex literature, and responding to literature through various types of writing, small-group discussion, whole-class seminars, and activities. Students are exposed to both classic and modern science fiction, reading critically in order to analyze the concepts of science fiction, apply literary terms, and write in a variety of styles including reflective, creative, analytical, and research-based. Science fiction films that complement the course themes are used as a critical comparison, as is a study of current science or technological discoveries and their implications for our future. A final speculative research project will enable students to synthesize knowledge gained throughout the semester in the form of a multi-genre project. This course is also offered as a blended learning course.

**SENIOR COMPOSITION**

Grades: 11, 12  
 1 semester Prerequisite: None  
 1/2 Credit Graded: Conventional

Senior Composition is a semester-long writing course that fulfills a senior requirement. This course emphasizes the writing process from the beginning ideas to the final writing of the complete composition, as well as emphasizing individual goal setting and development as a writer. Writing assignments develop career and college readiness, including narratives, arguments, informational texts and literary analysis. Modes of expression include essays, research papers, presentations, and multi-media projects. Collecting, evaluating, and organizing evidence to develop valid conclusions is stressed, as well as command of the conventions of Standard Written English. Students review grammar, usage, and mechanics. Mentor texts are included to give students a basis for writing.

**APPLIED ENGLISH/THEATER PRODUCTION**

(formerly known as Stagecraft)  
 Grades: 9, 10, 11, 12  
 1 Semester Prerequisite: None  
 1/2 Credit - English\* (repeatable) Graded: Conventional

Applied English/Theater Production (formerly known as Stagecraft) is a semester-long repeatable elective responsible for sets, lights, sound and management, and designed to foster the appreciation of the historical, mechanical, social, political, and cultural contexts of technical theater. Through their reading of a variety of dramatic literature, students make significant contributions to support the dramatic requirements of our theater repertory company's season. As theater artists and craftsmen, they analyze the social and political forces that have influenced the role of drama in people's lives. Structural and tangible responses to dramatic texts and creative writing constitute the assignments. Emphasis is given to the development of a personal theater philosophy and the benefits of lifelong learning in theater. \* Elective credit only. Does not meet English graduation requirements and/or senior English Requirement.

**YEARBOOK**

Grades: 9,10,11,12  
 1 Year Prerequisite: Teacher Approval  
 1 Credit (Elective)\* Graded: Conventional

Yearbook is a year-long elective that focuses on production of the school yearbook. Students are responsible for planning, arranging interviews and pictures, writing and editing stories, designing layouts, and selling advertising. Creativity and quality writing are essential skills for staff members. Students apply to the yearbook advisor at the time of registration. \* Does not meet English graduation requirements and/or senior English Requirement.

**IB ENGLISH LITERATURE HL**

Grades: 11, 12  
 4 semesters Fulfills IB Group 1 requirement  
 2.0 credits Prerequisite: None  
 Recommendation: Honors ELA II  
 (Fulfills 2 English Cr. required Graded: Weighted  
 for graduation)

From the Language A: Literature Guide published by the International Baccalaureate Organization, February 2011: The course is built on the assumption that literature is concerned with our conceptions, interpretations and experiences of the world. The study of literature can therefore be seen as an exploration of the way it represents the complex pursuits, anxieties, joys and fears to which human beings are exposed in the daily business of living. It enables an exploration of one of the more enduring fields of human creativity, and provides opportunities for encouraging independent, original, critical and clear thinking. It also promotes respect for the imagination and a perceptive approach to the understanding and interpretation of literary works.

Through the study of a wide range of literature, the Language A: Literature course encourages students to appreciate the artistry of literature and to develop an ability to reflect critically on their reading. Works are studied in their literary and cultural contexts, through close study of individual texts and passages, and by considering a range of critical approaches. In view of the international nature of the IB and its commitment to intercultural understanding, the Language A: Literature course does not limit the study of works to the products of one culture or the cultures covered by any one language. The study of works in translation is especially important in introducing students, through literature, to other cultural perspectives. The response to the study of literature is through oral and written communication, thus enabling students to develop and refine their command of language.

***EL ENGLISH***

EL courses are for students whose primary language is not English and who qualify for placement in EL based on testing results. Emphasis is on student's acquisition of the English language through the integration of reading, writing, speaking, and listening. The courses reflect the goals and objectives of the regular English classes.

**EL GUIDED STUDIES**

Grades: 9,10,11,12  
 1 Semester Prerequisite: EL Placement  
 1/2 Credit Graded: Conventional

This course is designed to help EL students acquire the specific skills to become self-confident and self-directed learners as they progress through high school. This curriculum promotes the development and practical application of study techniques, personal attitudes and habits, communication and problem solving skills, goal-setting and monitoring, and future visioning. Instruction will also support reading and writing for academic purposes.

**EL READING**

Grades: 9,10,11,12  
 Prerequisite: EL Placement  
 Graded: Conventional  
 1 Semester  
 1/2 Credit

This course is designed to provide reading strategies for students who are developing language skills which are needed for success in classes. The course is based on individual needs. Students have the opportunity to improve their reading through an integrated language arts program. Reading for enjoyment is strongly emphasized along with vocabulary development. Evaluation is based on discussions, writings, portfolio, quizzes, and participation. The writing process will be utilized, emphasizing pre writing, drafting, and revision. Writing folders will be maintained throughout the semester.

**GLOBAL LANGUAGE DEPARTMENT**

The Global Language program of Worthington Kilbourne aims to develop:

- Communication through speaking, reading, writing in the target language and understanding the spoken language.
- Comparisons of linguistics of English and of the target language.
- Connections between the foreign language classroom and the other disciplines, i.e., social studies, art, technology, family and consumer science, etc.
- Cultural awareness through comparing and contrasting culture of the United States and peoples of the target language.
- Communities through using the target language outside the classroom for personal, professional and occupational pursuits.

Homework policy: It is expected that students will devote thirty minutes a night to assignments, including review of previous vocabulary.

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	1520	French 2	1
9, 10, 11, 12	1522	Honors French 2	1
10, 11, 12	1530	French 3	1
10, 11, 12	1532	Honors French 3	1
11, 12	1540	French 4	1
11, 12	1542	Honors French 4	1
12	1551	Advanced Placement French	1
11, 12	1571, 1572	IB French HL Y1, Y2	2
9, 10, 11, 12	1710	Latin 1	1
10, 11, 12	1720	Latin 2	1
11, 12	1730	Latin 3	1
12	1740	Latin 4	1
12	1751	Advanced Placement Latin	1
11, 12	1761, 1762	IB Latin SL Y1, Y2	2
9, 10, 11, 12	1910	Spanish 1AB	1
9, 10, 11, 12	1920	Spanish 2	1

9, 10, 11, 12	1922	Honors Spanish 2	1
10, 11, 12	1930	Spanish 3	1
10, 11, 12	1932	Honors Spanish 3	1
11, 12	1940	Spanish 4	1
11, 12	1942	Honors Spanish 4	1
12	1950	Spanish 5	1
12	1951	Advanced Placement Spanish	1
11, 12	1971, 1972	IB Spanish HL Y1, Y2	2

**FRENCH 2**

Grades: 9,10,11,12  
 Prerequisite: French 1B or 1AB  
 Graded: Conventional  
 2 Semesters  
 1 Credit

This course more fully develops the student's ability to listen, speak, read and write French through study of the cultures. Grammar study continues with additional structures and tenses. Emphasis is on using the French language with an expanding vocabulary. Discussions stress the diversity of French-speaking people.

**HONORS FRENCH 2**

Grades: 9,10,11, 12  
 Prerequisite: French 1AB  
 and teacher recommendation  
 Graded: Conventional or pass/fail  
 2 Semesters  
 1 Credit

This course builds on the content in French 2 with an expectation that students will apply language learning at a more sophisticated level. Students will be expected to demonstrate a high proficiency and fluency level in each skill through more consistency and spontaneity in their use of vocabulary, grammar, expressions and verbal structures.

**FRENCH 3**

Grades: 10,11,12  
 Prerequisite: French 2  
 Graded: Conventional  
 2 Semesters  
 1 Credit

This course continues to develop the student's skills and knowledge with an emphasis on improvement of fluency and in the range of ability to speak, understand, read and write French. More opportunities are provided for study of the French cultures and people.

**HONORS FRENCH 3**

Grades: 10,11,12  
 Prerequisite: French 2, teacher recommendation  
 Graded: Conventional  
 2 Semesters  
 1 Credit

This course builds on the content in French 3 with an expectation that students will demonstrate greater depth of knowledge of the language and cultures through more open-ended writings and responses. Students will be expected to demonstrate a high proficiency level in each skill and have a greater understanding of French cultures and people.

**FRENCH 4**

2 Semesters  
1 Credit

Grades: 11,12  
Prerequisite: French 3  
Graded: Conventional

Every effort will be made to conduct the class primarily in French and students likewise are expected to communicate in French. This course stresses the increased use of idiomatic language. Students further develop their competence in listening, reading, speaking and writing, with a focus on communication and culture. The course will begin the study of some of the major themes: Families and Communities; Personal and Public Identities; Contemporary Life; Global challenges; Science and Technology; Beauty and Aesthetics.

**HONORS FRENCH 4**

2 Semesters  
1 Credit

Grades: 11,12  
Prerequisite: French 3  
and teacher recommendation  
Graded: Conventional

Honors students are expected to demonstrate the skills and attitudes taught in French 4 with greater depth of knowledge of the language cultures through more open-ended writings and responses.

**ADVANCED PLACEMENT FRENCH**

2 Semesters  
1 Credit

Grade: 12  
Prerequisite: French 4  
Graded: Conventional, weighted

The AP French Language and Culture course is an advanced study of language and culture. This course is designed as a culmination of students' French studies and is structured around six themes: Families and Communities; Personal and Public Identities; Contemporary Life; Global Challenges; Science and Technology; and Beauty and Aesthetics.

Students who enroll in this course should already have a good command of the grammar, extended vocabulary, substantial knowledge of Francophone culture, and considerable competence in listening, reading, speaking and writing.

This course strives to promote both fluency and accuracy in language use. Students will continue to build their language proficiency in the three modes of communication: interpretive (understanding audio, audiovisual, written and print materials), presentational (giving oral reports and writing essays), and interpersonal (through emails and conversations).

The class will be conducted exclusively in French and students likewise are expected to communicate understanding of the cultures (products, practices and perspectives), incorporate interdisciplinary topics (connections), and make comparisons between the target language and culture and their own native language and culture in real-life settings. Authentic materials will be used in a variety of contexts.

This course provides intensive preparation for the AP French Language and Culture Exam, which can give the opportunity to earn a college credit.

**IB FRENCH HL**

4 semesters  
2.0 credits

Grades: 11, 12  
Prerequisite: Successful completion  
of French or Honors French 2 & 3  
Graded: Conventional, Weighted

This is a 2-year program that is designed as a culmination of students' French studies. Every effort will be made to conduct the class exclusively in French and students likewise are expected to communicate in French. Students will work on improving their ability to communicate in French by focusing on the four language skills of speaking, reading, writing and listening. Furthermore, students will study grammar and vocabulary in order to improve their ability to communicate across a wide variety of topics. The courses will focus on 5 of the 8 themes described in the IB Course Handbook: Communication and Media, Global Issues, Social Relationships, Cultural diversity, Customs and Traditions, Health, Leisure, Science and Technology. Students will develop their linguistic abilities through the development of receptive (understanding audio, audiovisual, written and print materials), productive (giving oral presentations and writing a variety of texts) and interactive skills (spontaneous exchange of ideas). Materials will extend from everyday oral exchanges to literary texts, and will be directly related to the culture of French speaking countries in order to develop students' intercultural understanding. Classroom activities will make a point to dismantle cultural stereotypes in order to create an awareness and appreciation of the different perspectives of people from other cultures.

**LATIN 1**

2 Semesters  
1 Credit

Grades: 9,10,11,12  
Prerequisite: None  
Graded: Conventional

Basic grammatical principles and vocabulary of the Latin language are learned and practiced in reading modified Latin passages that address such topics in Roman culture and history as geography, mythology, and daily life. Emphasis is placed on the influence of the Romans in our lives today, particularly through the study of English derivatives.

**LATIN 2**

2 Semesters  
1 Credit

Grades: 10,11,12  
Prerequisite: Latin 1  
Graded: Conventional

Latin grammar and vocabulary development continues emphasizing the influence of Latin on the English language, including in medical and legal terms. Students study Roman culture, history, government, mythology, religious observances and architecture.

**LATIN 3**

Grades: 11,12  
 2 Semesters Prerequisite: Latin 2  
 1 Credit Graded: Conventional

Basic grammatical principles are reviewed and advanced concepts are learned. Continued vocabulary development is emphasized through a study of the Roman authors Caesar, Catullus, Livy, Virgil and Ovid. The historical perspective of this course includes a study of the late Republic and early Empire. An opportunity is given to examine the problems of Rome in daily living and politics. An introduction to Latin poetry - its rhythm, beauty and message - is afforded through the poems of Ovid or Vergil.

**LATIN 4/ ADVANCED PLACEMENT LATIN**

Grade: 12  
 2 Semesters Prerequisite: Latin 3  
 1 Credit Graded: Conventional

Following a review of grammatical structures, students spend most of their time reading selections from Caesar's Gallic wars and Vergil's Aeneid. Through translation and discussion, the literary style of each work is examined. Students will analyze, compare and discuss common themes concerning Roman life, history, politics and belief found in each work. Those student opting for Advanced Placement credit will follow the Advanced Placement syllabus which involves additional translation, Advanced Placement essays, and practice with Advanced Placement multiple choice questions.

**IB LATIN SL**

Grades: 11, 12  
 4 semesters Fulfills IB Group 2 requirement;  
 2.0 credits Prerequisite: Latin 2  
 Graded: Conventional, Weighted

Adapted from the Classical Languages Guide published by the International Baccalaureate Organization, May 2010: The Diploma Programme courses in Latin provides an opportunity for students to explore the language, literature and culture of ancient Rome. This ancient civilization has played a vital part in shaping many modern societies and cultures. The language itself is versatile and finely structured, and has had a major influence on the development of most modern European languages. The rich and varied literature of Rome has left its mark on almost every genre of modern writing. The study of Latin gives important insights into the culture that produced it, and offers a bridge between the contemporary world and the civilizations of antiquity. . . . Much contemporary thinking is still informed by the political, religious and legal principles of the Roman world, and the course includes a study of its historical development and wider cultural achievements. In the classical languages it is a fundamental principle that the texts should be studied in the original language. Linguistic skills lie at the heart of the course, since it is through a visceral understanding of the workings of a language that true intellectual contact can be made with the peoples of the past. In order to broaden students' knowledge of Latin literature, students will study some works in transla-

tion, but the foundation remains linguistic. It is intended that through studying Latin in its cultural context, students will see that culture and language are symbiotic, and that they shape one another.

**SPANISH 1AB**

Grades: 9,10,11,12  
 2 Semesters Prerequisite: No prior Spanish,  
 1 Credit or completed Spanish 1A  
 or experience in another foreign language  
 Graded: Conventional or pass/fail

This course is designed for students beginning Spanish at the high school level and will cover the 1A and 1B material in one year. Students are introduced to the cultures and peoples of Spanish-speaking countries and develop beginning vocabulary and pronunciation by gradually building a foundation of speaking and understanding Spanish. Writing and reading reinforce the listening and speaking skills.

**SPANISH 2**

Grades: 9,10,11,12  
 2 Semesters Prerequisite: Spanish 1AB  
 1 Credit Graded: Conventional

This course more fully develops the student's ability to listen, speak, read and write Spanish through study of Spanish-speaking cultures. Grammar study continues with additional structures and tenses. Emphasis is on using the Spanish language with an expanding vocabulary. Discussions stress the diversity of Spanish-speaking people.

**HONORS SPANISH 2**

Grades: 9,10,11,12  
 2 Semesters Prerequisite: Spanish 1, teacher recom-  
 1 Credit mendation  
 Graded: Conventional

This course builds on the content in Spanish 2 with an expectation that students will demonstrate greater depth of knowledge of the language and cultures through more open-ended writings and responses.

**SPANISH 3**

Grades: 10,11,12  
 2 Semesters Prerequisite: Spanish 2  
 1 Credit Graded: Conventional

This course continues to develop the student's skills and knowledge with an emphasis on fluency and range of ability to speak, understand, read, and write Spanish. Grammar and vocabulary study continues to build. Readings of class and contemporary literature and frequent opportunities to write help students develop and refine their skills. More opportunities are provided for study of Spanish-speaking cultures and people.



**HONORS SPANISH 3**

Grades: 10,11,12  
 2 Semesters Prerequisite: Spanish 2 or  
 1 Credit and teacher recommendation  
 Graded: Conventional

This course builds on the content in Spanish 3 with an expectation that students will demonstrate greater depth of knowledge of the language and cultures through more open-ended writings and responses.

**SPANISH 4**

Grades: 11,12  
 2 Semesters Prerequisite: Spanish 3  
 1 Credit Graded: Conventional

This course is conducted primarily in Spanish. It continues to build skills, knowledge and attitudes stressing the use of communication in 3 modes: receptive (understanding authentic audio, audiovisual, written and print materials), productive (giving oral presentations and writing a variety of texts) and interactive (spontaneous exchanges of ideas). The themes for this course will focus on real-world issues as they relate to the Spanish speaking world: social relationships, customs and traditions, leisure time, technology and media, global challenges, cultural diversity, the environment and health.

**HONORS SPANISH 4**

Grade: 11,12  
 2 Semesters Prerequisite: Spanish 3  
 1 Credit and teacher recommendation  
 Graded: Conventional

Honors students are expected to demonstrate the skills and attitudes taught in Spanish 4 with greater depth of knowledge of the language and cultures through more open-ended writings and responses..

**SPANISH 5**

Grade: 12  
 2 Semesters Prerequisite: Spanish 4  
 1 Credit Graded: Conventional

This course is a senior course targeted for those students who have completed four credits of Spanish and are interested in working to improve their communication and literacy skills in Spanish. This course is designed to give students real life opportunities to improve their Spanish communication skills and their understanding of the history and culture of the Spanish-speaking world through the study of film, music, literature and news media. This course will be conducted exclusively in Spanish and students are expected to utilize Spanish as the primary language of communication in class. This course will extend student learning in the areas of cultural knowledge and language acquisition beyond what is taught in the previous sequence of courses. The assessments in this class are designed to encourage students to use Spanish in real-life ways in order to demonstrate their understanding of the cultural themes studied in class.

**ADVANCED PLACEMENT SPANISH**

Grade: 12  
 2 Semesters Prerequisite: Spanish 4  
 1 Credit Graded: Conventional, weighted

This course is a senior course targeted for those students who have completed four credits of Honors level Spanish and are interested in working to improve their communication and literacy skills in Spanish. This course is designed to give students real life opportunities to improve their Spanish communication skills and their understanding of the history and culture of the Spanish-speaking world through the study of film, music, literature and news media. This course will be conducted exclusively in Spanish and students are expected to utilize Spanish as the primary language of communication in class. This course will extend student learning in the areas of cultural knowledge and language acquisition beyond what is taught in the previous sequence of courses. The assessments in this class are designed to prepare students for the rigorous expectations of the AP Spanish Language Examination authored and administered by the College Board. Class time will be dedicated to the practice of activities similar to those that appear on the College Board Assessment and unit assessments will reflect the format and expectations of the AP Examination.

**IB SPANISH HL**

Grades: 11, 12  
 4 semesters Fulfills IB Group 2 requirement;  
 2.0 credits Prerequisite: Spanish 3  
 Graded: Conventional, Weighted

This is a 2-year program that is designed as a culmination of a student's Spanish studies. Every effort will be made to conduct the class exclusively in Spanish and students likewise are expected to communicate in Spanish. Students will work on improving their ability to communicate in Spanish by focusing on the four language skills of speaking, listening, reading and writing. Furthermore, students will study grammar and vocabulary in order to improve their ability to communicate across a wide variety of topics. Over the course of two years the focus will be based on three core themes: Social Relationships, Communication and Media, and Global Issues. In addition, other optional themes will include Leisure Activities, Cultural Diversity, Science and Technology, Customs and Traditions and Health. Students develop their linguistic abilities through the development of 3 communicative skills: receptive (understanding authentic audio, audiovisual, written and print materials), productive (giving oral presentations and writing a variety of texts) and interactive (spontaneous exchanges of ideas). Materials will range from everyday spoken interactions to literary texts and will be directly related to the culture of Spanish speaking countries in order to develop students' intercultural understanding. Classroom activities will make a point to dismantle cultural stereotypes in order to create an awareness and appreciation of different perspectives of people from other cultures.

**MATHEMATICS and  
COMPUTER PROGRAMMING**

All Worthington Kilbourne students are required to complete four units of credit in Mathematics. The Worthington School District believes that knowledge of mathematics is essential to the development of the whole person. Students are encouraged to realize their full potential in order to enhance their self-esteem and their ability to assume a purposeful role in our global society. The mathematics department highly recommends the purchase of a TI-84 calculator for use in all levels of mathematics classes.

11, 12	3340	Pre-Calculus	1
11, 12	3345	Honors Pre-Calculus	1
12	3370	A. P. Calculus (AB)	1
12	3380	A. P. Calculus (BC)	1
11, 12	3981, 3982	IB Math SL Y1, Y2	2
11, 12	3993	IB Math Studies SL	1
<b>Computer Programming*</b>			
9, 10, 11, 12	1300	Intro to Computer Prog. 1	1/2
9, 10, 11, 12	1305	Intro to Computer Prog. 2	1/2
10, 11, 12	1316	Introduction to Prog. Logic	1/2
11, 12	1320	Advanced Computer Science	1

\* these courses do not satisfy the math graduation requirements

**Sequence of Study**

**9th Grade**

Math IA  
Math I  
Honors Math II/STEM Honors Math II

**10th Grade**

Math IB  
Math II  
Honors Math III  
STEM Honors Math III  
Block Math II/Block Math III

**11th Grade**

Math II  
Math III  
Financial Algebra/Transition to College Math  
Honors Precalculus  
Precalculus  
IB Math SL Y1 or HL Y1

**12th Grade**

Math III  
Precalculus  
Transitions to College Mathematics  
Financial Algebra  
AP Calculus AB or BC  
IB Math SL Y2 or HL Y2

**MATH IA**

2 Semesters  
1 Credit  
Grades: 9  
Prerequisite: Middle School Math 8  
Graded: Conventional  
Counselor Recommendation

Math IA is part 1 of the first course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. Course content includes relationships between quantities, linear and exponential relationships, reasoning with equations as well as congruence, proof, and constructions. The course is designed to remain fluid to adapt to student needs as well as provide teaching strategies that allow students more time to learn math. This approach to learning should include but is not limited to, in-depth, hands-on opportunities for students to solve problems. Students who successfully complete Math 1A should enroll in Math 1B and will take the integrated Mathematics 1 Performance-Based Assessment (PBA) and the End-of-Year Assessment (EOY) at the end of Math 1B course. Counselor approval required.

**MATH IB**

2 Semesters  
1 Credit  
Grades: 10  
Prerequisite: Middle School Math I  
Graded: Conventional  
Counselor Recommendation

Math IB is part 2 of the first course in a sequence of courses designed to provide students with a rigorous program of study in mathematics. Course content includes a continued focus on linear and exponential relationships, descriptive statistics, congruence, proof, constructions as well as connecting Algebra and Geometry through coordinates. The course is designed to remain fluid to adapt to student needs as well as provide teaching strategies that allow students more time to learn math. This approach to learning should include, but is not limited to, in-depth, hands-on opportunities for students to solve problems,. Students who successfully complete Math 1A should enroll in Math 1B and will take the Integrated Mathematics I Performance-Based Assessment (PBA) and the End-of-Year Assessment (EOY) at the end of Math IB course. Counselor approval required.

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9	3002	Math I	1
9	3002A	Math IA	1
10	3002B	Math IB	1
10, 11	3003	Math II	1
9	3004	Honors Math II	1
9	3012	STEM Honors Math II	1
11	3006	Math III	1
10, 11	3007	Honors Math III	1
10	3014	STEM Honors Math III	1
10, 11	3005	Block Math II	1
10, 11	3015	Block Math III	1
11, 12	3185	Financial Algebra	1
11, 12	3191	Transitions to College Mathematics	1

**MATH I**

Grades: 8 & 9  
 2 Semesters Prerequisite: Middle School Math 1  
 1 Credit Graded: Conventional

This is the first course in a sequence of courses designed to provide students with a rigorous program of study in mathematics to prepare them for college and career readiness. Topics include relationships between quantities; linear and exponential relationships; reasoning with equations; descriptive statistics; congruence, proof, and constructions; as well as, connecting Algebra and Geometry through co-ordinates.

**MATH II**

Grades: 10  
 2 Semesters Prerequisite: Math I  
 1 Credit Graded: Conventional

This is the second course in a sequence of courses designed to provide students with a rigorous program of study in mathematics to prepare them for college and career readiness. Topics include extending the number system; quadratic functioning and modeling; expressions and equations; applications of probability; similarity, right triangle trigonometry and proof; as well as, circles with and without coordinates.

**HONORS MATH II**

Grades: 9  
 2 Semesters Prerequisite: Math I  
 1 Credit Graded: Conventional

This is the second course in a sequence of courses designed to provide students with a rigorous program of study in mathematics leading to AB and BC Advanced Placement Calculus preparing students for college and career readiness. Topics include extending the number system; quadratic functioning and modeling; expressions and equations; applications of probability; similarity, right triangle trigonometry and proof; as well as, circles with and without coordinates. Students taking Honors Math II will study additional topics from complex numbers, polynomials, statistics, and geometry to prepare them for advanced mathematical studies.

**STEM HONORS MATH II**

Grades: 9  
 2 Semesters Prerequisite: Math I  
 1 Credit Graded: Conventional

The course is the same as Math II with an emphasis on Stem topics and procedures encountered in the second year of the Stem progression.

**MATH III**

Grades: 11  
 2 Semesters Prerequisite: Math II  
 1 Credit Graded: Conventional

This is the third course in a sequence of courses designed to provide students with a rigorous program of study in mathematics to prepare them for college and career readiness. Topics include inferences and conclusions from data; polynomial, rational, and radical relationships; trigonometry of general triangles and trigonometric functions; and mathematical modeling.

**HONORS MATH III**

Grades: 11  
 2 Semesters Prerequisite: Honors Math II  
 1 Credit Graded: Conventional

This course is the third is a sequence of mathematics courses designed provide students with a rigorous program of study in mathematics leading to AB or BC Advanced Placement Calculus preparing students for college and career readiness. Topics include inferences and conclusions from data; polynomial, rational, and radical relationships; trigonometry of general triangles and trigonometric functions; and mathematical modeling. Students taking Honors Math III will study additional topics from statistics, polynomials, and trigonometry to prepare them for advanced mathematical studies.

**STEM HONORS MATH III**

Grades: 11  
 2 Semesters Prerequisite: Honors Math II  
 1 Credit Graded: Conventional

The course is the same as Math III with an emphasis on Stem topics and procedures encountered in the second year of the Stem progression.

**BLOCK MATH II + BLOCK MATH III**

Grades: 10, 11  
 2 Semesters/2 Periods Prerequisite: Math I  
 2 Credits and teacher recommendation  
 Graded: Conventional

This course is designed for students who wish to accelerate through the high school mathematics curriculum, Block Math II/Math III is offered during two consecutive class periods for the entire year. Students must complete both semesters to receive credit for both Math II and Math III, as the content is interspersed throughout. Due to the fast-paced nature of the course, attendance and completing homework are essential to success.

**FINANCIAL ALGEBRA**

Grades: 11, 12  
 2 Semesters Prerequisite: Math III  
 1 Credit Graded: Conventional

Financial Algebra is an algebra-based technology and project-oriented program. The mathematics necessary for daily living is embedded in the content that directly relates to financial decisions adults make in their daily lives. The mathematical formulas, functions and graphical representations used in the course assist students in making sense of the financial world around them through mathematical modeling and equip them with the ability to make sound financial decisions based on data.

**TRANSITIONS TO COLLEGE MATHEMATICS**

Grades: 11, 12  
 2 Semesters Prerequisite: Math III  
 1 Credit and teacher recommendation  
 Graded: Conventional

Transitions to College Mathematics is an alternative for those students who do not feel ready for the pace and abstraction of the Pre-Calculus course. The course reviews and extends the algebraic concepts explored in Math III including further study of linear and quadratic equations and functions, polynomials and rational functions, trigonometry, logarithms, sequences, series, probability, and descriptive statistics, and the complex number system. This course is designed to assist with the transition to a college preparatory program.

**PRE-CALCULUS**

Grades: 11, 12  
 2 semesters Prerequisite: Math III, H. Math III or  
 1 Credit teacher recommendation  
 Graded: Conventional

Pre-Calculus integrates the major ideas of functions, trigonometry, and solving equations and inequalities needed for calculus. Some of the functions analyzed include linear, exponential, logarithmic, quadratic, power, polynomial, rational, and trigonometric, along with transformations of these functions. Other topics include matrices, polar coordinates, logic, complex numbers, modular arithmetic, mathematical induction, graphs, and vectors. This class prepares students for AP Calculus AB.

**HONORS PRECALCULUS**

Grades: 11, 12  
 2 semesters Prerequisite: Honors Math III  
 1 Credit teacher recommendation  
 Graded: Conventional

Pre-Calculus integrates the major ideas of functions, trigonometry, and solving equations and inequalities needed for calculus. Some of the functions analyzed include linear, exponential, logarithmic, quadratic, power, polynomial, rational, and trigonometric, along with transformations of these functions. Other topics include matrices, polar coordinates, logic, complex numbers, modular arithmetic, mathematical induction, graphs, and vectors. Limits and differentiation are added to the honors

course. This class prepares students for AP Calculus AB.

**ADVANCED PLACEMENT CALCULUS (AB)**

Grades: 12  
 2 semesters Prerequisites: Honors Precalculus, or  
 1 Credit Precalculus and teacher  
 recommendation  
 Graded: Conventional, weighted

AP Calculus AB is a college level course which prepares students for the AP exam given in May. Emphasis is placed on the theoretical aspects of the calculus of functions of a single variable. As dictated by the AP syllabus, the topics of the course include limits, polynomial and transcendental functions, the derivative and its applications, the definite integral and its applications, slope fields, and the techniques of integration. Students benefit from spending more time on these topics than would be allotted in most calculus courses taken in college. Students in the course will need a programmable graphing calculator (TI-84 is recommended). This technology is an integral part of the course curriculum. Students may expect the amount of work in this class to be equivalent to taking a college calculus class.

**ADVANCED PLACEMENT CALCULUS (BC)**

Grades: 12  
 2 semesters Prerequisites: Honors Precalculus and  
 1 Credit teacher recommendation  
 Graded: Conventional, weighted

Advanced Placement Calculus BC is offered to the student who has taken a sequence of honors mathematics classes through Honors PDM and likes the challenge of a faster paced math course. Calculus BC includes all the topics of Calculus AB plus additional topics, including divergent and convergent series, Taylor series, MacLaurin series, Euler's methods, and slope fields. Students who sign up for Calculus BC should intend to take the AP exam in May.

**IB MATHEMATICS SL**

Grades: 11, 12  
 4 semesters Fulfills IB Group 5 requirement,  
 2.0 credits Prerequisite: Math III  
 (Fulfills 2.0 Mathematics credits Graded: Conventional, or  
 for graduation) Weighted

Adapted from the Mathematics SL Guide published by the International Baccalaureate Organization, September 2006: This course caters for students who already possess knowledge of basic mathematical concepts, and who are equipped with the skills needed to apply mathematical techniques correctly. This course will provide a sound mathematical background as they prepare for future studies in subjects such as chemistry, engineering, economics, and business administration. The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way. Students should wherever possible apply the math-

emational knowledge they have acquired to solve realistic problems set in an appropriate context. The internally assessed component, the portfolio, offers students a framework for developing independence in their mathematical learning by engaging in mathematical investigation and mathematical modeling. Students are provided with opportunities to take a considered approach to these activities and to explore different ways of approaching a problem. The portfolio also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

**IB MATH STUDIES SL**

2 semesters  
1.0 credits  
(Fulfills 1.0 Mathematics credits for graduation)

Fulfills IB Group 5 requirement,  
Prerequisite: Math 3  
Graded: Conventional, Weighted

Adapted from the Math Studies SL Guide published by the International Baccalaureate Organization, March 2012: This course is organized and structured with the following tenets in mind: placing more emphasis on student understanding of fundamental concepts than on symbolic manipulation and complex manipulative skills; giving greater emphasis to developing students' mathematical reasoning rather than performing routine operations; solving mathematical problems embedded in a wide range of contexts; using the calculator effectively. The course includes project work, a feature unique to mathematical studies SL within group 5. Each student completes a project, based on their own research; this is guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical study of their choice using their own experience, knowledge and skills acquired during the course. This process allows students to take sole responsibility for a part of their studies in mathematics. The students most likely to select this course are those whose main interests lie outside the field of mathematics. All parts of the syllabus have therefore been carefully selected to ensure that an approach starting from first principles can be used. As a consequence, students can use their own inherent, logical thinking skills and do not need to rely on standard algorithms and remembered formulae. Students likely to need mathematics for the achievement of further qualifications should be advised to consider an alternative mathematics course.

**COMPUTER PROGRAMMING**

**INTRODUCTION TO COMPUTER PROGRAMMING 1**

Grades: 9,10,11,12  
1 Semester  
1/2 Credit

Prerequisites: Math II  
Graded: Conventional or pass/fail

Introduction to Computer Programming 1 provides an introduction to computer programming. Visual Basic is an event-driven language that includes a window's interface with corresponding code. The students learn in a lab/seminar setting, developing programs to solve a variety of problems. Topics include computer components, interface design, and structured program design,

including sequence, decision-making and repetition. No previous programming experience is required. Any student interested in computer programming is encouraged to enroll.

**INTRODUCTION TO COMPUTER PROGRAMMING 2**

Grades: 9,10,11,12  
1 Semester  
1/2 Credit

Prerequisites: Intro to Comp. Prog.1 and recommendation  
Graded: Conventional or pass/fail

Introduction to Computer Programming 2 provides a second course in Visual Basic programming. Topics include arrays, file management, graphics, additional control objects and an introduction to the concept of object-oriented programming through the study of classes. This course provides a foundation for continued study of computer languages.

**INTRODUCTION TO PROGRAMMING LOGIC**

Grades: 10,11,12  
1 Semester  
1/2 Credit

Prerequisite: Math II or concurrent  
Graded: Conventional or Pass/fail

Students receive an introduction to the concepts of programming logic in a lab setting while developing programs for curricular and non-curricular applications and problem solving. Topics include computer systems, program design using flowcharts, program implementation and analysis, testing and debugging. The course covers the basic units of logic: sequence, selection, and loop. Programming languages used may include Python, Java and UML.

**ADVANCED PLACEMENT COMPUTER SCIENCE (JAVA)**

Grades: 11,12  
2 Semesters  
1 Credit

Prerequisites: Intro to Java or Intro to Comp. Programming 2 concurrent Precalculus or higher  
Graded: Conventional, weighted for AP

AP Computer Science is for those interested in extending study of the JAVA Language with the intent of taking the Advanced Placement Computer Science Test. Lab work is intensive and may require time beyond the regular class period. Additional topics covered include classes, recursion, array lists, inheritance, and arrays.

**SCIENCE DEPARTMENT**

All Worthington Kilbourne students are required to complete 3 units of credit with at least one credit in life sciences and one credit in physical science.

The science curriculum at the high school provides students with a broad range of experiences in all areas of science. These experiences are designed to prepare the student to meet the challenges of the 21st century and the complex decisions he or she will face as society deals with the technological age. The science program has as one

of its goals to provide for science literacy. To accomplish that goal, students are encouraged to consider scheduling science during all four years. Most colleges recommend a minimum of three or four years. Many selective colleges require four years of science for students interested in science-related major areas of study.

The science program provides many opportunities for those students who wish to examine science concepts more deeply. These students can opt to take Honors Physical Science, Honors Biology, Honors Chemistry, and A.P. Physics. In addition, A.P. Biology and A.P. Chemistry may be taken by students wishing an additional year of study in these areas. Usually several science courses are offered in the summer to allow students to advance through the science sequence at a faster rate. All science courses include extensive laboratory experiences.

**\*SUGGESTED SEQUENCE**

9th	10th	11th	12th
Physical Science	Biology	Natural Systems Science	Chemistry
Physical Science or Hon. Physical Science	Biology or Hon. Biology	Chemistry/ Hon. Chemistry or Natural Systems Science	AP Physics 1 , AP Physics 2
Physical Science	Biology & Chemistry	AP Physics 1,	AP Chemistry and/or AP Biology and/or AP Physics 2
Physical Science	Biology	Natural Systems Science	No Science
STEM Honors Biology	STEM Physical Science	STEM Chemistry	(Advanced Science)
Physical Science	Biology	IB Environmental Sys. & Soc., IB Biology	IB Environmental Sys. & Soc., IB Biology

\*Read individual course descriptions and prerequisites to determine other combinations.

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9	4001	STEM Physical Science	1
9, 10, 11, 12	4002	Physical Science	1
9	4003	Honors Physical Science	1
10	4004	STEM Biology	1
10, 11, 12	4005	Biology	1
10, 11	4006	Honors Biology	1
9	4007	STEM Honors Biology	1
10	4008	Biology+ ELA 2	2
10	4011	STEM Physical Science	1
10, 11, 12	4200	Chemistry	1
11, 12	4225	STEM Chemistry	1
9, 10, 11, 12	4210	Honors Chemistry	1
10, 11, 12	4321	Advanced Placement Physics I	1
11, 12	4322	Advanced Placement Physics II	1
11, 12	4110	Advanced Placement Biology	1
11, 12	4220	Advanced Placement Chemistry	1
11, 12	4410	IB Biology	1
11, 12	4103	Astronomy	.5
11, 12	4150	Biomedical Science	.5
11, 12	4107	Environmental Studies	.5
11, 12	4113	Forensics	.5

9, 10, 11, 12	Field Ecology	1
9, 10, 11, 12	Marine Ecology	1/2
<b>PHYSICAL SCIENCE</b>		

2 Semesters  
1 Credit

Grades: 9,10,11,12  
Prerequisite: None  
Graded: Conventional

Physical Science concepts include the nature of matter and energy; identifiable physical properties of substances; and properties of forces that act on objects. Ninth graders learn about forces and motions, structures and properties of atoms, how atoms react with each other to form other substances, and how molecules react with each other or other atoms. Earth and space science topics include processes that move and shape the Earth; Earth's interaction with the Solar System. Students continue to develop a deeper understanding of the processes of scientific inquiry and how these processes use evidence to support conclusions based on logical reasoning. Students investigate ways in which science and technologies combine to meet human needs and solve human problems. Ninth graders trace the historical development of scientific theories and ideas, explore scientific theories, and develop their scientific literacy to become knowledgeable citizens. This course will include many mathematical problem experiences and their constructs. These topics will be presented and studied on both a qualitative and a quantitative basis. Class activities include both individual and group laboratory experimentation, lecture, discussions, demonstrations, and problem-solving. Evaluation is based on quizzes, tests, lab reports, lab techniques, and homework, and projects.

**STEM PHYSICAL SCIENCE (9)**

Grades: 9  
2 Semesters  
1 Credit  
Prerequisite: Concurrent with Math 1 & Intro to Engineering  
Graded: Conventional

STEM Physical Science is an inclusive but rigorous and introductory physical science. The purpose is to prepare students for a future career in a technology. This course is meant to complement the Introduction to Engineering course and the first year Math 1 course.

**STEM PHYSICAL SCIENCE (10)**

Grades: 10  
2 Semesters  
1 Credit  
Prerequisite: Concurrent with Honors Math 3 & Principles of Engineering  
Graded: Conventional

STEM Physical Science is an inclusive but rigorous and challenging blend of traditional physics and introductory physical science. The purpose is to prepare students for a future career in a STEM field. This course is meant to complement the POE Engineering course and the 2nd year high school math course.

**HONORS PHYSICAL SCIENCE**

Grade 9  
 2 Semesters  
 Credit 1  
 Prerequisites: 8th Grade teacher recommendation  
 Concurrent with Math II  
 Graded: Conventional

Physical Science concepts include the nature of matter and energy; identifiable properties of substances; and properties of forces that act on objects. Ninth graders learn about forces and motions, structures and properties of atoms, how atoms react with each other to form other substances, and how molecules react with each other or other atoms. Earth and space science topics include processes that move and shape the Earth; Earth's interaction with the Solar System. Students continue to develop a deeper understanding of the processes of scientific inquiry and how these processes use evidence to support conclusions based on logical reasoning. Students investigate ways in which science and technologies combine to meet human needs and solve human problems. Ninth graders trace the historical development of scientific theories and ideas, explore scientific theories, and develop their scientific literacy to become knowledgeable citizens. Honors Physical Science includes an increased emphasis on mathematical analysis of data with opportunities for students to engage in discovery or inquiry based learning that leads to independent investigations. Students examine additional literature and scientific reviews.

The students identify topics to research and then design and implement comprehensive culminating activities that incorporate technology in their applications and presentations. Teachers utilize rubrics that include standards that reflect higher level thinking skills to assess student performance.

**BIOLOGY**

Grades: 10,11, 12  
 Graded: Conventional  
 2 Semester  
 1 Credit

This course emphasizes the concepts, principles, and theories that enable people to understand the living environment. Students study life science concepts such as cells and their structure and function, the genetic and molecular bases of inheritance, biological evolution and the diversity and interdependence of life. Students explain the Earth's history using geologic evidence, identify the Earth's resources, and explore processes that shape the Earth. The flow of energy and the cycling of matter through biological and ecological systems are taught in the 10th grade. Embedded throughout his study are the basic processes of inquiry, modeling investigations, and the nature of science. Students learn to trace the historical development of scientific theories, ideas, ethical guidelines in science, the interdependence of science and technology, and the study of emerging issues.

**STEM BIOLOGY**

Grades: 10  
 2 Semester  
 1 Credit  
 Prerequisite: Concurrent with Math 2 or Math 3 & Principles of Engineering  
 Graded: Conventional

This course will introduce students to fundamental concepts and scientific inquiry in the biological sciences. Linkages with mathematics include measurement, proportions and ratios, graphing, modeling, and statistical analysis. Linkages with technology education include use of the Scientific Method in tandem with the Design Process. Students will be actively engaged in designing scientific investigations, collecting data, and analyzing and interpreting data to increase their understanding of the natural world.

**STEM HONORS BIOLOGY**

Grades: 9  
 2 Semester  
 1 Credit  
 Prerequisite: Concurrent with Honors Math II or higher & Intro to Engineering  
 Graded: Conventional

This course will introduce students to fundamental concepts and scientific inquiry in the biological sciences. Linkages with mathematics include measurement, proportions and ratios, graphing, modeling, and statistical analysis. Linkages with technology education include use of the Scientific Method in tandem with the Design Process. Students will be actively engaged in designing scientific investigations, collecting data, and analyzing and interpreting data to increase their understanding of the natural world. This course will have an increased emphasis on mathematical analysis of data and review of scientific literature and reviews. Students may be given the opportunity to engage in independent investigations.

**HONORS BIOLOGY**

Grades: 10, 11, 12  
 2 Semester  
 1 Credit  
 Prerequisite: Science teacher recommendation  
 Graded: Conventional

This course emphasizes the concepts, principles, and theories that enable people to understand the living environment. Students study life science concepts such as cells and their structure and function, the genetic and molecular bases of inheritance, biological evolution and the diversity and interdependence of life. Students explain the Earth's history using geologic evidence, identify the Earth's resources, and explore processes that shape the Earth. The flow of energy and the cycling of matter through biological and ecological systems are taught in the 10th grade. Embedded throughout his study are the basic processes of inquiry, modeling investigations, and the nature of science. Students learn to trace the historical development of scientific theories, ideas, ethical guidelines in science, the interdependence of science and technology, and the study of emerging issues. Honors Biology includes an increased emphasis on mathematical analysis

of data with opportunities for students to engage in discovery or inquiry based learning that leads to independent investigations. Students examine additional literature and scientific reviews. Teachers utilize rubrics that include standards that reflect higher level thinking skills to assess student performance.

**BIOLOGY + ENGLISH LANGUAGE ARTS II**

Grade:10  
 2 Semesters Prerequisite: Teacher Recommendation  
 1 Credit Science and Graded: Conventional  
 1 Credit English

Biology + ELA II connection is a course designed to integrate both the English and science curricula. These courses cover the same required material as the non-connected classes. (Refer to the course descriptions for ELA II and Biology). However, much of the English curriculum includes literature that directly relates to the science concepts being studied. This type of blocking gives more continuity to each class, thus students are more focused and tend to learn concepts more quickly and thoroughly. Because the teachers are in daily communication, they avoid assigning major projects, papers, or tests on the same day, and together identify students who may be experiencing difficulties or have special needs. The atmosphere in the connections classroom is generally more relaxed and student oriented. Time each day may be set aside for students to meet with both teachers for clarification of assignments and concerns. Evaluations will be based on labs, homework, activities, project work, quizzes and tests.

**CHEMISTRY**

Grades: 10, 11, 12  
 2 Semesters Prerequisite: Biology (may be concurrent)  
 1 Credit & Physical Science,  
 Math II, (may be concurrent)  
 Graded: Conventional

This is an introductory level chemistry course. It will be preparation for college chemistry. This course will prepare the student to interpret everyday events in terms of chemical concepts and processes. The topics of study will be: basic laboratory techniques and safety procedures, matter, atomic structure, chemical bonding, writing and using balanced chemical equations, acid-base reactions, introductory organic chemistry, chemical equilibrium, analysis of substances as to both amount and nature of contents. This course includes many mathematical problem solving experiences and theoretical constructs, but the overall emphasis will be placed upon the qualitative aspects of chemistry as well as the role chemistry plays in everyday life. Class activities include individual and group laboratory experimentation, lecture, discussions, demonstrations, and problem solving sessions. Evaluation is based upon quizzes, tests, lab reports, lab techniques, and homework.

**STEM CHEMISTRY**

Grades: 10, 11, 12  
 2 Semesters Prerequisite: STEM Biology & STEM  
 1 Credit Physical Science  
 Math II (may be concurrent)  
 Graded: Conventional

STEM chemistry is a multidisciplinary approach to science that will apply the same chemistry course understandings and content to better understand relationships between chemistry, experimental design and the application of mathematics. This course includes the same topics as Chemistry, and expands upon the engineering and mathematics integrated into the course.

**HONORS CHEMISTRY**

Grades: 9, 10, 11, 12  
 2 Semesters Prerequisite: Biology (may be concurrent)  
 1 Credit & Physical Science,  
 Math II (may be concurrent)  
 Graded: Conventional

This introductory-level chemistry course will prepare the student to interpret everyday events in terms of chemical concepts and processes. The topics of study will be generally those of any introductory high school chemistry course: basic laboratory techniques and safety procedures, types and states of matter, atomic structure, chemical bonding, writing and using balanced chemical equations, acid-base reactions, introductory organic chemistry, oxidation-reduction, and analysis of substances as to both amount and nature of contents. These topics will be presented and studied on a qualitative and quantitative basis. The theoretical and mathematical aspects of the studies will be extensive. Class activities include individual and group laboratory experimentation, lecture, discussions, demonstrations, and problem-solving sessions. Evaluation is based upon quizzes, tests, lab reports, lab techniques, and homework. Recommended for students planning to take AP Chemistry.

**ADVANCED PLACEMENT PHYSICS 1: MECHANICS**

Grades: 10, 11, 12  
 2 Semesters Prerequisite: Math 2  
 1 Credit & Chemistry (may be concurrent)  
 Graded: Conventional, weighted

The key concepts and related content that define the algebra based Physics 1 are organized around underlying principles called the big ideas, which encompass the core scientific principles, theories and processes of physics that cut across traditional content boundaries and provide students a broad way of thinking about the physical world. Physics 1 topics include: kinematics, Newton's laws of motion, torque, rotational motion and angular momentum, gravitation and circular motion, work, energy, and power, linear momentum, oscillations, mechanical waves and sound, and introduction to electric circuits.



**ADVANCED PLACEMENT PHYSICS 2: MECHANICS**

Grades: 11, 12  
 2 Semesters Prerequisite: AP Physics 1 or Physics 1  
 1 Credit Graded: Conventional, weighted

The key concepts and related content that define the algebra based AP Physics 1 are organized around underlying principles called the big ideas, which encompass the core scientific principles, theories and processes of physics that cut across traditional content boundaries and provide students a broad way of thinking about the physical world. Physics 2 is an algebra-based, introductory college-level physics course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. Through inquiry-based learning, students will develop scientific critical thinking and reasoning skills.

**ADVANCED PLACEMENT BIOLOGY**

Grades: 11, 12  
 2 Semesters Prerequisite: Biology & Physical Science  
 1 Credit Chemistry (may be concurrent)  
 Graded: Conventional, weighted

The AP Biology course is designed to be the equivalent of a two-semester college introductory biology course usually taken by biology majors during their first year. This course is designed to provide an in-depth study of some of the major concepts of Biology. These concepts include: cellular function, biochemistry, bioenergetics, protein synthesis, genetics, evolution, population dynamics, animal biology and physiology, and plant biology and physiology. Teaching methods include a heavy reading load as well as lectures, discussions and laboratory experiences. Evaluation is based on quizzes, tests, lab reports, and homework.

**ADVANCED PLACEMENT CHEMISTRY**

Grades: 11,12  
 2 Semesters Prerequisite: Chemistry, Math II  
 1 Credit Graded: Conventional, weighted

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The use of mathematics is prevalent and laboratory work is extensively used in the course and is often a cooperative venture. College-level texts and laboratory books are used to teach students six big ideas in chemistry: 1) the chemical elements are fundamental building materials of matter, and all matter can be understood in terms of arrangements of atoms. These atoms retain their identity in chemical reactions, 2) Chemical and physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them, 3) Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons, 4) Rates of chemical reactions are determined by details of the molecular collisions, 5) The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter, 6) Any bond or intermolecular attraction

that can be formed can be broken. These two processes are in a dynamic competition, sensitive to initial conditions and external perturbations. Evaluation is based upon homework, laboratory results and reports, quizzes and tests.

**ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

Grades: 11, 12  
 2 Semesters Prerequisite: Completion of/or  
 1 Credit concurrent enrollment in chemistry  
 Graded: Conventional, weighted

The AP Environmental Science course is designed to be the equivalent of a lab-based, introductory college course in environmental science. Unlike most other introductory-level college science courses, environmental science includes content from a wide variety of subject areas. The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the inter-relationships of the natural world, to identify and analyze environmental issues both natural and man-made, to evaluate the relative risks associated with these issues, and to examine alternative solutions for resolving or preventing them. Laboratory, field, and internet-based research and investigations are emphasized to familiarize students with contemporary research, investigative and problem-solving techniques.

**IB BIOLOGY SL**

Grades: 11 or 12  
 2 semesters Fulfills IB Group 4 requirement;  
 1.0 credits Prerequisite: Physical Science & Biology  
 (Fulfills 1.0 Science Graded: Conventional, Weighted  
 credits required for graduation,

The IB Diploma Program biology standard level course covers the relationship of structure and function at all levels of complexity. Students learn about cell theory, the chemistry of living things, plant structure and growth, and the difference between genes and alleles, among many other topics, to further their understanding of and learning about biology. Throughout this challenging course, students become aware of how scientists work and communicate with each other. Further, students enjoy multiple opportunities for scientific study and creative inquiry within a global context.

**ASTRONOMY**

Grades: 11, 12  
 1 Semester Prerequisite: Completion of Physical  
 Science and Biology  
 0.5 Credit Graded: Conventional

Astronomy introduces you to the composition and structure of the universe. Astronomy is the scientific study of the contents of the entire Universe. This course provides the student with a study of the universe and the conditions, properties, and motions of bodies in space. The content includes, but is not limited to, historical astronomy, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars.

**BIOMEDICAL SCIENCE**

Grades: 11, 12  
 1 Semester Prerequisite: Completion of Physical  
 Science and Biology  
 0.5 Credit Graded: Conventional

This course provides an introduction to biomedical science through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. The activities and projects in this course introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems. Key biological concepts, including maintenance of homeostasis in the body, metabolism, inheritance of traits, and defense against disease are embedded in the curriculum.

**ENVIRONMENTAL SCIENCE**

Grades: 11, 12  
 1 Semester Prerequisite: Completion of Physical  
 Science and Biology  
 0.5 Credit Graded: Conventional

This course surveys key topic areas including the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment. Students learn that political and private decisions about the environment and the use of resources require accurate application of scientific processes, including proper data collection and responsible conclusions.

**FORENSICS**

Grades: 11, 12  
 1 Semester Prerequisite: Completion of Physical  
 Science and Biology  
 0.5 Credit Graded: Conventional

This course focuses on the collection, identification and analysis of crime scene evidence. Emphasis will be placed on the methods that link suspect, victim, and crime scene. Laboratory exercises will include fingerprinting, handwriting analysis, ballistics, blood typing, hair and fiber examination, and DNA analysis. Case studies and current events will be explored. This course will focus upon evidence based reasoning skill.

**FIELD ECOLOGY**

Grades: 9, 10, 11, 12  
 Summer School Enrollment Prerequisite: None  
 and 1 Credit Graded: Pass/Fail  
 (Does not replace any of the required Program Fee  
 3 credits of science)

Field Ecology offers participants an opportunity to travel in

and explore unique ecosystems. This class is offered through Worthington Field Studies, Inc. and involves approximately a month-long field experience to interesting destinations in the western part of North America. Students study biology, geology and Native American cultures of the Southwestern or Rocky Mountain regions. Activities including camping, hiking, backpacking, and rafting are integral to this unique field experience. Participants are expected to highly motivated and in good physical condition.

**MARINE ECOLOGY**

Grade: 9, 10, 11, 12  
 Arranged - Spring Break Prerequisite: None  
 1/2 Credit Graded: Pass/Fail  
 (Does not replace any of the required Program Fee  
 3 credits of science)

Marine Ecology offers participants an opportunity to travel and explore the unique ecology of the coral reef. This class is offered through Worthington Field Studies, Inc. and involves a week-long trip during Spring Break to the Caribbean or the West Indies. Students study the biology, geology and oceanography of the region. Activities include snorkeling and scuba diving. Participants are expected to be highly motivated, good swimmers and in good physical condition.

***HISTORY & SOCIAL STUDIES  
 DEPARTMENT***

The History & Social Studies Department seeks to achieve three major educational goals: (1) to teach students about human behavior in both individual and social contexts; (2) to provide students with essential information about the cultural history of mankind, the traditions of their own society, and the present state of the world; and (3) to develop certain attitudes and skills. A sampling of appropriate and desirable attitudes would include respect for evidence even when it goes against prejudices and preconceptions; tolerance of differing points of view; appreciation of human dignity; a sense of civic responsibility; and devotion to the welfare of the country. Appropriate skills are those associated with problem solving; the ability to discover relevant facts and to organize the facts into a meaningful pattern; to weigh conflicting evidence and discount biased statements; and to choose among various interpretations and policies.

Students who master these skills will have the ability to carry on independent inquiry. Since dynamic change appears to be the only constant in this modern age, members of the History & Social Studies Department hope to prepare students in such a way that learning can continue even after formal education ceases. To satisfy graduation requirements, students must complete Modern World History (one credit); American History or Advanced Placement U.S. History (one credit); and American Government (one-half credit) or Advanced Placement U.S. Government (1 credit). In addition, students must select an additional one-half credit course for a total of three credits.

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	2002	Modern World History	1
10	2007	American History	1
11, 12	2008	American Government	1/2
11, 12	2175	Economics & Personal Fin. Lit.	1/2
12	2420	U. S. Political Thought & Rad.	1/2
11, 12	2460	Intro to Behavioral Sciences	1/2
10, 11, 12	2240	Global Cultures	1/2
10, 11, 12	2255	American Multicultural Studies	1/2
10, 11, 12	2220	Classical Humanities	1/2
10, 11, 12	2200	A. P. U. S. History	1
11, 12	2210	A. P. U. S. Government	1
11, 12	2512,	IB Economics SL Y2	1 1/2
11, 12	2521	IB History SL Y1, Y2	1 1/2
	2522		
11, 12	2531	IB History HL Y1, Y2	2
	2532		
11, 12	2015	IB Psychology SL	1

**MODERN WORLD HISTORY**

Grades: 9,10,11,12  
 Prerequisite: None  
 2 Semesters  
 1 Credit  
 Graded: Conventional

This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

**AMERICAN HISTORY**

Grade: 10  
 Prerequisite: None  
 2 Semesters  
 1 Credit  
 Graded: Conventional

The aim of American History is to provide students with the knowledge and understanding of our nation's past required to more effectively respond to its present, prepare for its future, and to serve as responsible participants in the American democracy. Major cultural, political, social, and economic trends are emphasized. Continuity between the pre-Industrial and post-Industrial United States is achieved through a selective enrichment of students' earlier study of pre-Industrial development.

**AMERICAN GOVERNMENT**

Grade: 11, 12  
 Prerequisite: American History  
 1 Semester  
 1/2 Credit  
 Graded: Conventional

How the American people govern themselves at national, state and local levels of government is the basis for this course. Students can have an impact on issues addressed by government through service learning projects.

**ECONOMICS AND PERSONAL FINANCIAL LITERACY**

Grade: 11, 12  
 Prerequisite: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional

This course explores the fundamentals that guide individuals and nations as they make choices about how to use limited resources to satisfy their wants. More specifically, it examines the ability of individuals to use knowledge and skills to manage limited financial resources effectively for a lifetime of financial security.

**U. S. POLITICAL THOUGHT AND RADICALISM**

Grades: 12  
 Prerequisite: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional or pass/fail

U. S. Political Thought and Radicalism analyzes various groups and organizations from the extreme right to the far left of the political spectrum. It studies political and social movements, the 1960's, dissent and protest, radical thought alienation of individuals and groups, the social historical context of radical movements, and the political labeling process. Present day interest groups representing the extremes of the political spectrum are invited to speak to and interact with this course.

**INTRODUCTION TO BEHAVIORAL SCIENCES**

Grades: 11, 12  
 Prerequisite: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional or pass/fail

Introduction to Behavioral Sciences provides students with the opportunity to explore various methods for studying human behavior and learn basic concepts in the fields of sociology and psychology. The course is designed to help students learn more about themselves, identify the function of social groups, and explain the behavior of people in groups. They develop an awareness of the problems arising from social and cultural differences, learn more about sociology and cultural anthropology, determine whether the scientific process can be applied to the study of human behavior, and become independent thinkers.

**AMERICAN MULTICULTURAL STUDIES**

Grades: 10,11,12  
 Prerequisites: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional or pass/fail

Multicultural Studies is an elective course that challenges students to examine key events in American history from the perspective of non-dominant cultures. In the course students will analyze the causes and effects of events, focusing on the historical background to current diversity issues. Students will come to have a better understanding of the diverse ethnicities which have contributed to American history and contemporary American culture. Students will explore various answers to the questions, "Who is an American?" and "What is America?"

**GLOBAL CULTURES**

Grades: 10,11,12  
 Prerequisite: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional or pass/fail

Global Cultures is a discussion-based cultural geography course that qualifies as a geography credit if required as a college entrance requirement. The main focus is on cultures considered non-western, such as those found in Africa, Asia, and Latin America. Emphasis is placed on geography, literature, religion, education, and family organization found within various cultures that have developed in these regions.

**CLASSICAL HUMANITIES**

Grades: 10,11,12  
 Prerequisite: None  
 1 Semester  
 1/2 Credit  
 Graded: Conventional or pass/fail

This elective course is devoted to the study of classical Greek and Roman civilization. Students will gain a better understanding of two of the most influential civilizations in world history. Through the study of history, mythology/religion, and culture, students will be able to identify ancient Greece and ancient Rome’s contribution to modern warfare, government, philosophy, religion, language, poetry, literature, art, and architecture.

**ADVANCED PLACEMENT U. S. HISTORY**

Grades: 10(R), 11, 12(E)  
 Prerequisite: Modern World History  
 2 Semesters  
 1 Credit  
 Graded: Conventional

The Advanced Placement United States History course fulfills the requirements of The College Board’s advanced Placement program and “prepares the student for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory colleges courses” (*Advanced Placement Course Description*, published by the College Board, 1995.) Students who complete this course are prepared to take the advanced Placement U. S. History Examination, administered by The College Board each May. Advanced Placement United States History is a content-oriented course which examines the years between 1492 and the present. Incorporated into this course are major themes which include constitutional development, the presidency, foreign policy, economics, reform and idealism, race relations and minorities, feminism, and social history. The course will help students learn to use higher order cognitive skills that derive from the discipline of history. Achievement of this goal is facilitated by the heavy emphasis on the development of critical reading and writing skills.

**ADVANCED PLACEMENT U. S. GOVERNMENT**

Grade: 11,12  
 Prerequisite: American History  
 or concurrently  
 2 Semesters  
 1 credit  
 Graded: Conventional, Weighted

The Advanced Placement U. S. Government course is designed to provide the serious student with the opportunity to gain a critical perspective on government and politics in the United

States. This course involves both the study of general concepts used to interpret United States politics and the analysis of specific case studies. It will also familiarize students with the various institutions, groups, beliefs, and ideas that make up the United States political reality. Through the development of critical writing skills, students will learn to recognize and clarify value conflicts and communication problems; examine and weigh alternatives; and project consequences and make decisions to solve problems in public policy. Emphasis will be placed on analysis and research. This course will require a greater number of reading and writing assignments than normally given in regular classes. Students will be encouraged to take the Advanced Placement Examination in U. S. Government at the end of the year.

**IB ECONOMICS SL Y2**

Grades: 11, 12  
 2 semesters  
 1 credit  
 Prerequisite: Modern World History & American History  
 (Fulfills 1.5 Soc.Studies credits required for graduation & Financial Literacy requirement)  
 Graded: Conventional, Weighted  
 Fulfills IB Group 3 requirement;

From the Economics Guide published by the International Baccalaureate Organization, November 2010: The study of economics is essentially about dealing with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements. The IB Diploma Programme economics course emphasizes the economic theories of microeconomics, which deal with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability. The ethical dimensions involved in the application of economic theories and policies permeate throughout the Economics course as students are required to consider and reflect on human end-goals and values. The Economics course encourages students to develop international perspectives, fosters a concern for global issues, and raises students’ awareness of their own responsibilities at a local, national and international level. The course also seeks to develop values and attitudes that will enable students to achieve a degree of personal commitment in trying to resolve these issues, appreciating our shared responsibility as citizens of an increasingly interdependent world.

**IB HISTORY SL/HL**

Grades: 11, 12  
SL=3 semesters, 1.5 credits      Fulfills IB Group 3 req;  
HL=4 semesters, 2.0 credits      Prerequisite: Successful  
Completion of Modern World History &  
American History or AP American History  
Graded: Conventional, Weighted

History is more than the study of the past. It is the process of recording, reconstructing and interpreting the past through the investigation of a variety of sources. It is a discipline that gives people an understanding of themselves and others in relation to the world, both past and present. It is an exploratory subject that poses questions without providing definitive answers. It involves the selection and interpretation of data and critical evaluation of it. Students of history should appreciate the relative nature of historical knowledge and understanding, as each generation reflects its own world and preoccupations and as more evidence emerges. A study of history both requires and develops an individual's understanding of, and empathy for, people living in other periods and contexts.

A working knowledge of European history is the essential point of entry into a study of World History because it introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of ideas and institutions that shaped the 20th and 21st Century world.

The theme of our IB History course is "Conflict within and among societies." The course examines the causes of conflict, ways it can be resolved short of resorting to violence/war, and the reasons and consequences for the failure to avoid violence/war.

Year One begins with an examination of the discipline of history and the work of historians. The major units of study for Year One are: The French Revolution and Napoleon; the First World War; and German/Italian Aggression leading to the Second World War.

Year Two begins with the completion of the Historical Investigation, a work of independent historical research, thinking, and writing. The major units of study for Year Two are: two civil wars – China and Spain; Japanese aggression in East Asia and the Pacific; the Second World War; the Cold War.

Students will read and extract evidence from works by historians representing multiple historical perspectives and write essays reflecting their own historical thinking.

**IB PSYCHOLOGY SL**

Grades: 11, 12  
2 Semesters      Fulfills IB Group 3 req;  
1.0 Credits      Prerequisite: None  
Graded: Conventional, Weighted

The IB Diploma Program Psychology course is the systematic study of behavior and mental processes. Students undertaking

the source can expect to develop an understanding of how psychological knowledge is generated, developed and applied. This will allow them to have a greater understanding of themselves and appreciate the diversity of human behavior. The holistic approach reflected in the curriculum, which sees biological, cognitive and sociocultural analysis being taught in an integrated way ensures that students are able to develop an understanding of what all humans share, as well as the immense diversity of influences on human behavior and mental processes. The ethical concerns raised by the methodology and application of psychological research are also key considerations of the IB psychology course (IBO, 2015).

***SPECIAL EDUCATION  
DEPARTMENT***

The Worthington School District staff is continually striving to comply with and meet the spirit of State and Federal laws relating to the education of all children. We know that students learn in many different ways, and we know that some settings and methods seem to work better for some youth than for others. For these reasons, the following program alternatives are available to eligible students regardless of handicap for special education.

***SPECIAL EDUCATION COURSES***

Special Education classes provide instruction based upon a student's Individualized Education Program (IEP) in the Learning Center or regular classroom. Evaluation for all courses will be based on academic achievement measured by daily work, homework, quizzes, verbal response and teacher observation.

Case Management - FCBDD staff work with families to link them with needed community supports and to access services.

Family Resources - Respite care, counseling, parent training, and financial assistance for adaptive equipment.

Vocational - Enclaves for paid work opportunities, sheltered work, community supported work with job development and job coaching.

Residential - Supported living.

The following courses will be offered, however, they will not be offered every year. Please see course description in this book.

- Adaptive Keyboarding and Computer Skills
- Adaptive Health
- Adaptive Lifeskills
- Adaptive Speech
- Adaptive Technology Education
- Functional Art
- Functional Health
- Functional Speech

**TRANSITION COURSES**

Transition courses are designed to provide students with instruction and training to help them transition from school to work and adult life. Several placements have been established in the school and community where students can learn and practice employability skills in an authentic setting. The continuum of transition courses is as follows:

- Sheltered Internship
- Internship
- Enclave
- Job Training

**SHELTERED INTERNSHIP**

Grades: 9,10,11,12  
 2 Semesters Prerequisite: IEP Placement,  
 1 Credit teacher, parent recommendation &  
 enrollment  
 through the Secondary Transition Specialist  
 Graded: Pass/Fail

This course is designed to help students develop employability skills within the school setting under close supervision of an adult. The type of jobs the students perform closely resemble those found in sheltered employment.

**INTERNSHIP**

Grades: 9, 10, 11, 12  
 1 Semester Prerequisite: IEP Placement,  
 1/2 Credit per semester teacher, parent  
 Repeatable recommendation  
 and enrollment through the  
 Secondary Transition Specialist  
 Graded: Pass/Fail

This course is designed to help students develop and practice employability skills within the school setting. Students perform actual jobs under the supervision of a Transition Coach.

**ENCLAVE**

Grades: 9, 10, 11, 12  
 2 semesters Prerequisite: IEP Placement,  
 1 Credit teacher and parent recommendation and  
 enrollment through the Secondary Transition Specialist;  
 Graded: Pass/Fail

Enclave offers identified students a structured and supervised work program in a community-based setting. The purpose of these courses is to allow students an opportunity to practice and gain employability skills as they explore various entry level career opportunities. At the end of this course, students should be better able to define their job preferences. Students receive support at the sites from a Transition Coach.

**JOB TRAINING PROGRAM**

4 Credits maximum  
 1 Credit=120 hours

Grades: 9, 10, 11, 12  
 Prerequisite: IEP Placement,  
 Teacher and parent  
 Recommendation  
 enrollment through the  
 Job Training Consultant.  
 Must be 16 years old.  
 Ability to obtain own transportation.  
 Completion of the referral packet.  
 Graded: Pass/Fail

This course is designed to help the student who has successfully demonstrated positive employability skills to work in a job within the community. Students receive support from a Job Coach.

**TECHNOLOGY STUDIES  
 DEPARTMENT**

Technology Studies is intended to be an integral part of the general education of all students. Courses are organized to accommodate students of all ability levels, making it possible for activities to be planned in line with individual interests and aptitudes and for students to progress at a rate of speed commensurate with their abilities. It is the aim of this department to provide the student with exposure, knowledge and skills in Technology Studies. Exposure to this all-encompassing area is a must in today's fast paced technologically oriented society and will help the students in the following ways: they will gain a conceptual understanding of technology's effect on society and the individual; become problem solvers, creative thinkers and wise consumers; understand and be better prepared to focus on possible career choices; become technologically functional and effective manipulators of tools and materials; and learn skills and concepts.

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	7360	Intro to Engineering Design	1
10, 11, 12	7361	Principles of Engineering	1
10, 11, 12	7362	Digital Electronics	1
10, 11, 12	7363	Civil Engineering & Architecture	1
12	7364	Engineering Design & Dev.	1
9, 10, 11, 12	7370	*Intro to Engineering Design	1
10, 11, 12	7372	*Principles of Engineering	1
10, 11, 12	7374	*Digital Electronics	1
10, 11, 12	7376	*Civil Engineering & Architecture	1
9, 10, 11, 12	7600	Web Page Design	1/2
9, 10, 11, 12	7512	CADD	1/2
9, 10, 11, 12	7640	+Multimedia Communications	1/2
10, 11, 12	7645	+Advanced Multimedia Comm.	1/2
9, 10, 11, 12	7950	Photography/Digital Imaging	1/2
10, 11, 12	7951	Advanced Photo./Digital Imaging	1/2
9, 10, 11, 12	7970	Adaptive Technology Education	1/2

+Offered as a blended learning course

\* STEM Pathway

**PRE-ENGINEERING**

***Project Lead the Way***

Project Lead The Way is a national pre-engineering organization that has joined forces with business, industry, government and universities for the purpose of attracting and preparing both male and female students for the science, technology, engineering and math related fields at the college level.

The Ohio Department of Education, the Ohio Board of Regents and the National PLTW organization have awarded WKHS “National Accreditation” for excellence in program delivery in the PLTW program. This award is reserved for a small percentage of programs that are distinguished in their overall impact to the students and the school community.

Students will combine the content knowledge they are learning in their core courses with the technology and engineering skills they are mastering in the Project Lead the Way courses to engage with a wide variety of interesting challenges. All Project Lead the Way courses are lively, active and hands on - they also develop partnerships with local professionals who will work directly with the students in a variety of capacities.

This college prep, pre-engineering program is known to be fast paced and rigorous. It is also known for the enthusiasm of the students as their gifts, talents and curiosities are explored and assessed. Being an elective, homework is minimal, but it should be noted that most of the courses have a quick pace and require students to make the most of the time they have in class. All PLTW courses require the development of a professional portfolio that the student will take with them at the end of the class. There are also a variety of design, engineering and prototyping projects - some of which will require the students to work in teams.

Though the program’s intent is for students to take all of the associated classes in sequence, it is not required to stay in the program if a student’s interests lead them elsewhere.

Project Lead the Way articulates with hundreds of colleges and universities throughout the country. In all PLTW courses, students have the opportunity to earn university and/or college credit simultaneous to the high school credit they are receiving.

For those students who complete the necessary prerequisites, this program offers a special independent study opportunity for seniors. This capstone experience will allow students to mentor with professionals in various career fields as the students apply knowledge gained throughout their high school career toward the design and development of an intriguing project/experience.

**Special Note to women:**

Women are in extremely high demand in these fields. If you are comfortable with your math and science abilities, you should definitely explore the possibilities that PLTW could lead to. By taking IED - the first course in the PLTW series, you will gain a competitive edge over your peers, and will know if it is worth pursuing these interests in college.

**PLTW Program Sequence**

STEM Pathway - Freshmen		
Math 1 3002	STEM Physical Science 4001	Intro to Engineering 7360
Math 2 3003	STEM Physical Science 4001	Intro to Engineering 7360
Honors Math 2 3012	STEM HonorsBiology 4007	Intro to Engineering 7370
STEM Pathway - Sophomores		
Math 2 3003	STEM Biology 4004	Principles of Engineering 7361
Math 3 3006	STEM Biology 4004	Principles of Engineering 7361
Honors Math 3 3014	STEM Physical Science 4011	Principles of Engineering 7372

Year 1 - IED (Intro to Engineering Design)

Year 2 - POE (Principles of Engineering)

Year 3 - DE (Digital Electronics)

and/or

CEA (Civil Engineering & Architecture)

Year 4 - EDD (Engineering Design & Development)

and/or

CEA or DE (Civil Engineering & Architecture or Digital Electronics)

**Note: Civil Engineering & Architecture is also open to non-PLTW students who are juniors or seniors and are concurrently enrolled in an upper level math class.**

**PLTW Endorsement:**

The Ohio State University  
 President of the Board of Commissioners  
 Ventura Engineering, Inc.  
 Lockheed Martin  
 Worthington Chamber of Commerce  
 Columbus State Community College  
 Worthington Board of Education  
 Abbott Labs

**Additional Information:**

<http://www.pltw.org/index.cfm>

<http://pltwohio.org/>

<http://pltw.org/curriculum/college-credit-for-students.html>

[http://pltwohio.org/pltw\\_paths.cfm](http://pltwohio.org/pltw_paths.cfm)

**INTRODUCTION TO ENGINEERING DESIGN**

2 Semesters  
Credits 1  
Grade 9, 10, 11, 12  
Prerequisite: Math 1 (may take concurrently)  
Graded: Conventional or pass/fail

This is the first course in the Project Lead the Way program. It is designed to nurture student gifts, talents and curiosities about the design, technology and engineering related fields. Students will work side by side and on teams to develop innovative solutions to interesting design challenges. Along the way, students learn sophisticated design software applications, and practice the common sense problem solving skills that professionals use. The course applies and concurrently develops knowledge and skills in mathematics, science, and technology. The course of study includes: design process, modeling, sketching, prototyping, measurement, statistics, and applied geometry, presentation design and delivery, engineering drawing standards, cad solid modeling, reverse engineering, consumer product design, innovation, marketing, graphic design, engineering ethics, virtual design.

**PRINCIPLES OF ENGINEERING**

2 Semester  
1 Credit  
Grades: 10,11,12  
Prerequisite: Intro to Engineering Design  
Graded: Conventional or Pass/Fail

This course provides an overview of engineering and engineering technology. Students develop problem-solving skills by tackling real-world engineering problems. Through theory and practical hands-on experiences, students address the emerging social and political consequences of technological change. Students will build simple and complex machines designed to perform specific tasks, apply power and actuate. Principle's of Engineering is a foundation course in the Project Lead The Way Engineering Academy. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. The course of study includes: overview and perspective of engineering, the design process, engineering systems, statics, materials and materials testing, engineering for quality and reliability, dynamics.

**DIGITAL ELECTRONICS**

2 Semesters  
1 Credit  
Grades: 11, 12  
Prerequisite: POE & Math 2  
Graded: Conventional or Pass/Fail

This course is designed to teach about applied logic, which introduces the basics of electronics and digital systems – the building blocks to many useful products. The course is designed to expose students to engineering design and troubleshooting techniques that are used in the electronics field. Computer simulation software is used to design and test digital circuitry prior to actually constructing them in order to see if the circuits work. Students will also learn a systematic approach that engineers use to design the electronics that is used every day. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

**CIVIL ENGINEERING & ARCHITECTURE**

2 Semesters  
1 Credit  
Grades: 11,12  
Prerequisite: Math 2  
(Can be taken concurrently)  
Graded: Conventional

This course teaches students about the design, technology and engineering fundamentals associated with civil engineering, architecture, landscape design, interior design, and community management fields. Many hands on activities will take place such as soil testing, real working models of structures, construction of foundation, framing, plumbing and electrical systems. The course applies and concurrently develops knowledge and skills in mathematics, science, and technology. The course of study includes: design process, modeling, sketching, prototyping, project planning, presentation design and delivery, engineering drawing standards, CAD solid modeling, site planning, building design, innovation, project documentation & presentation, engineering ethics, and virtual design.

**ENGINEERING DESIGN & DEVELOPMENT**

1 Semester  
1 Credit  
Grades: 12  
Prerequisite: IED,POE, & DE  
Graded: Conventional

This course lets students apply what they have learned in core academic and Project Lead the Way course as they complete challenging, self-directed projects. Students work individually and in teams to design and build solutions to authentic engineering problems. An engineer or other appropriate business professional from the school's partnership team mentors each student. Examples of projects may include a robotic mascot for the school, a remote-controlled hovercraft, or a solar-powered device. This course equips students with the independent study skills that they will need in post-secondary education and careers associated with the business of engineering and engineering technology.



**WEB PAGE DESIGN**

Grades: 9, 10, 11, 12  
 1 Semester Prerequisite: Keyboarding &  
 1/2 Credit Computer Skills,  
 Multimedia or permission of instructor  
 Graded: Conventional or pass/fail

Would you like to be able to design your very own web site? If so, then this course is for you. The skills you learn could lead you into a career in Web Publishing. Skills that are taught include Internet basics, HTML coding, web design fundamentals, CSS layout, and web authoring, and publishing/uploading. These topics are reinforced by hands-on computer activities in which students create several web sites. Students will have the opportunity to actually upload one of the sites they create using Adobe Dreamweaver and Photoshop. All work is done in class.

**COMPUTER AIDED DRAFTING AND DESIGN**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or  
 pass/fail

Computer Aided Drafting and Design provides students with a basic exposure to sketching, two dimensional drawing, architecture, engineering, drafting and interior design. Students will explore various software packages and improve their skills in mathematics while increasing their visual awareness and design abilities. The topics covered will also relate to the broader context of technology and how design is woven into everything designed and created.

**MULTIMEDIA COMMUNICATIONS**

Grades: 9,10,11,12  
 1 Semester Graded: Conventional or pass/fail  
 1/2 Credit

Multimedia Communications is a course that provides students with the opportunity to gather, arrange and manipulate computer-based digital media. Audio, video, text and graphics are integrated to create the final product. Students learn how to make presentations, manipulate files, scan images and use both a digital camera and video equipment. Problem solving skills are developed as students create, design and produce copy ready work for posters, brochures, videos or web pages for school or community groups. Students develop knowledge and skills in using a complete suite of Adobe software, including Adobe Illustrator, DreamWeaver, Photoshop and Flash. This is a production type course that requires students to learn multimedia skills and concepts and then apply them in a meaningful way. This is a fun, fast, hands-on course. Skills will benefit high school, college or professional career. Evaluation is based on completed in-class assignments, tests and projects. There is no homework. This course is also offered as a blended learning course.

**ADVANCED MULTIMEDIA COMMUNICATIONS**

Grades: 10,11,12  
 1 Semester Prerequisite: Multimedia Comm.  
 1/2 Credit Graded: Conventional or pass/fail

Advanced Multimedia Communications builds on the fundamental knowledge and skills developed in Multimedia Communications. This course is for students who are interested in the areas of computer graphics, digital imaging, electronic publishing, multimedia presentation, and web page design. Students will learn about creating graphic images using painting and drawing programs; using the computer with scanners, digital cameras, and other digitizing hardware and software; digitizing artwork, still photographs, video and audio; editing digital files using appropriate software; using digital files to create graphic designs, electronic publishing, multimedia presentations, ad design and web pages. Throughout the course students develop a portfolio of their work. Skills benefit high school, college or professional career. Evaluation is based upon completed in-class assignments, tests and projects. This course is also offered as a blended learning course.

**BEGINNING PHOTOGRAPHY/DIGITAL IMAGING**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or pass/fail

Beginning Photography/Digital Imaging is a course that acquaints students with the history of photography, the basic principles of photography, and the basic techniques employed in the use of a camera, film developing, digital imaging and print making. The course is designed around classroom activities which include lectures, discussions, reading assignments, photographing subjects, and instruction in the use of photographic darkroom equipment. No prior knowledge of photography is necessary. Students should have their own camera, some type of 35mm camera or digital camera, to use. Students are expected to purchase some materials such as film, enlarging paper and matte board. During the semester students will also explore and discuss digital photography and Adobe Photoshop. All lab activities use black and white photographic technology. Evaluation will be based on tests and the completion of photographic assignments, which involve the taking of pictures outside of class, developing the film, and making enlargements in the darkroom.

**ADVANCED PHOTOGRAPHY/DIGITAL IMAGING**

Grades: 10,11,12  
 1 Semester Prerequisite: Beginning Photography  
 1/2 Credit (repeatable) Graded: Conventional or  
 pass fail

Advanced Photography/Digital Imaging will give students a chance to further pursue their knowledge and skills in photography. This course will differ from the beginning photography course by being more student centered. Students will be responsible for deciding the areas of photography they will pursue in more depth and contract with the instructor as to how they will achieve the goals which they have set. In addition, students will be able to work on photographs that may be used for the school

newspaper, the yearbook, or the literary magazine. Students will have more opportunity to create a personal portfolio of their work which could be very useful for applications to some colleges or art schools. It is recommended (though not required) that students have access to a 35mm or digital single lens reflex camera with manual settings for use in this course. Students are expected to purchase some materials such as film, enlarging paper and matte board. This course uses black and white photographic technology but also explores digital imaging and the use of the computer in refining and manipulating the photographic image. Evaluation will be based upon successful completion of contracts with the instructor and portfolios of photographic work. There may also be some tests over required knowledge.

**ADAPTIVE TECHNOLOGY EDUCATION**

Grades: 9,10,11,12  
 1 Semester Prerequisite: IEP Placement  
 1/2 Credit, repeatable Graded: Conventional or pass/fail

The Adaptive Technology program provides both academic and pre-vocational experiences for special education students. Students are exposed to a variety of technological processes such as tools and machines, electricity, photography and computers. They learn in a laboratory setting with hands-on activities. Learning experiences are created to help meet the needs of each student as identified in the Individualized Education program (IEP). Although specific instructional objectives are tailored to the need of each student, some fundamental goals are designed for all special education students who take this course.

**VISUAL AND PERFORMING ARTS**

Many colleges and universities require a fine arts credit for admission. Each college or university has its own requirements and not all of the courses listed below may meet each institution's criteria. Please check with your counselor or the university to determine if the course you choose will meet requirements.

The Worthington Kilbourne High School Visual and Performing Arts Department offers a diverse selection of courses in painting, drawing, sculpture, photography, video, music and theater.

The goal of the visual arts program is the enrichment and development of the aesthetic experience for a student as art relates to personal needs and those of the community and culture. A student's training should include the understanding of certain artistic concepts which have emerged and endured.

It should also encourage the student to employ the elements of art and the principles of basic design in daily decision making. All of a student's experience at the high school level should begin to take on significance. The student will come to understand that mere novelty has never been the key to creative expression and be guided to improve his/her standards of aesthetic judgment. Through individual personal expression, students begin to see for themselves the relationship of their own creative act to basic design principles. Through this experience students learn to analyze

and discuss creative efforts of others with sincere, intelligent and objective standards.

Photography courses encourage self expression and investigation through the various media.

Within the performing arts, we offer a wide range of elective courses. Students interested in exploring music through its performance may enroll in one or more of the band, choral, and orchestra organizations. Here, students:

- develop technical skills of playing, singing, and composition;
- learn the role music has played in society throughout history;
- study the styles and forms of music from earliest times to the present;
- establish standards of critical judgment by which to evaluate musical experiences;
- discover the creative, imaginative potential within themselves!

The music theory class provides opportunities for in-depth study of musical structure and composition.

An interactive Music Lab is available for the use of any student enrolled in any music organization or class. The lab resources include: iMac computers, extensive music-related software, several MIDI keyboard/synthesizers, and a Yamaha Electric Wind instrument.

Theater courses allow students to explore:

- design aspects of sets, costumes and lights;
- construction aspects of sets and costumes;
- acting, speaking, audition skills;
- marketing and management skills;
- theater history;
- social impact of the theater;
- critical evaluation of the performance;
- creative expression.

Students in the advanced theater course offer public performances several times a year in one of two theaters.

**Art**

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	8010	General Art (Art Foundations)	1/2
9, 10, 11, 12	8110	Ceramics & Sculpture 1	1/2
9, 10, 11, 12	8120	Ceramics & Sculpture 2	1/2
10, 11, 12	8130	Ceramics & Sculpture 3	1/2
9, 10, 11, 12	8310	Drawing 1	1/2
9, 10, 11, 12	8320	Drawing 2	1/2
10, 11, 12	8360	Painting 1	1/2
10, 11, 12	8370	Painting 2	1/2
11, 12	8380	Digital Art	1/2
11, 12	8410	Advanced Placement Portfolio	1/2
10, 11, 12	8411	Advanced Studio	

**GENERAL ART (ART FOUNDATIONS)**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or pass/fail

Students in Art foundations will have a broad experience with art. They will:

- make expressive art in a wide variety of drawing, painting, sculptural, and other media;
- learn how art can communicate meaning;
- learn about the roles and styles of art in a variety of cultures and historical periods;
- become familiar with the elements and principles of design.

Evaluation will be based on skill development, and demonstration of knowledge through a variety of means. This course is highly recommended as a prerequisite to Drawing 1.

**CERAMICS & SCULPTURE 1**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or pass/fail

This course is designed as an introduction to the medium of ceramics and three-dimensional expression. Emphasis is placed on studio practice and skill development of ceramic techniques as well as understanding the cultural and historical context of art in past and present societies. A variety of techniques and processes will be explored that will develop skills in the making of both functional and sculptural objects. Students gain knowledge of clay and glaze terminology. This course encompasses exploration and practice in the art-making process, creating and understanding aesthetic design, as well as art criticism and study of contemporary and traditional works. Evaluation is based on aesthetic design, craftsmanship, art criticism and the knowledge of vocabulary and processes.

**CERAMICS & SCULPTURE 2**

Grades: 9,10,11,12  
 1 Semester Prerequisite: "B" or above in Ceramics  
 1/2 Credit, repeatable and Sculpture 1,  
 Drawing 1 suggested  
 Graded: Conventional

Ceramics & Sculpture 2 is designed for the dedicated art student prepared to explore in-depth the possibilities of working 3-dimensionally by expanding knowledge and skills learned previously in Ceramics & Sculpture 1. A balance of structure and freedom creates an atmosphere for individual development in chosen areas of practice. Students have opportunities to focus on areas such as glazing, mold work, potter's wheel, sculpting, coil forms and mixed media. The course will also emphasize art history, criticism, and aesthetics. Evaluation is based on aesthetic design, craftsmanship, art criticism, and the knowledge of vocabulary and processes.

**CERAMICS & SCULPTURE 3**

Grades: 10,11,12  
 1 Semester Prerequisite: "B" or above in Ceramics  
 1/2 Credit, repeatable and Sculpture 2  
 Graded: Conventional

This course is designed for the advanced ceramics and sculpture student. It is individualized to meet each student's needs for skill mastery and self-expression. Each student prepares a portfolio of work suitable for exhibition or possible college application. Evaluation is based on aesthetic design, craftsmanship, art criticism, and the knowledge of vocabulary and processes. Students will be expected to reach high standards of initiative.

Evaluation is based on aesthetic design, craftsmanship, art criticism, and the knowledge of vocabulary and processes.

**DRAWING 1**

Grades: 9,10,11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or pass/fail

The goal of Drawing 1 is to help students develop their skills at observational drawing, concepts of design and aesthetics. They will learn strategies for seeing more accurately and rendering objects realistically. In addition, students will have opportunities to engage in creative art-making and to experiment with a wide range of materials. Evaluation is based upon art-making, and mastery of concepts.

**DRAWING 2**

Grade: 9,10,11,12  
 1 Semester Prerequisite: Drawing 1  
 1/2 Credit Graded: Conventional

Drawing 2 is a continuation of Drawing 1. It provides for more experience drawing from life as well as an extended range of mediums. Students will grow in their ability to communicate ideas through art as well as the development of their personal styles. Evaluation will be based on art-making, improvement, and problem-solving.

**PAINTING 1**

Grades: 10,11,12  
 1 Semester Prerequisite: Drawing 1  
 1/2 Credit Graded: Conventional or pass/fail

Painting 1 builds upon the drawing and compositional skills learned in Drawing 1. In addition, students will learn about color theory and various acrylic painting techniques. Students will paint on a variety of supports. Paintings will range in style from representational to abstract. Students are encouraged to experiment and solve visual problems creatively. Students will research painting periods and themes. Some materials will be expected to be supplied by the student. Evaluation is based on aesthetic design, craftsmanship, art criticism, and the knowledge of vocabulary and processes.

**PAINTING 2**

Grades: 10,11,12  
 1 Semester Prerequisite: Drawing 1, Watercolor  
 1/2 Credit & Painting 1  
 Graded: Conventional

Painting 2 will build upon the skills and concepts of Painting 1. Students will keep a sketchbook and research painting periods and themes. Painting styles will range from representational to abstract and include conceptual themes and series paintings. Students will prepare a display of their work. Some materials will be expected to be supplied by the student. Students are encouraged to experiment and solve visual problems creatively. Evaluation is based on aesthetic design, craftsmanship, art criticism, and the knowledge of vocabulary and processes.

**DIGITAL ART**

Grades: 11,12  
 1 Semester Prerequisite: None  
 1/2 Credit Graded: Conventional or  
 pass/fail

This course is designed to give students fundamentals in digitally designed artwork. The course will explore multiple digital resources and techniques including creating vector art and altering digital photography. This course will provide another alternative to those students interested in the role of art in a technology world. Digital Art is a blended learning course with an online component. Students may or may not meet with the teacher daily. This course is a blended learning course.

**ADVANCED STUDIO**

Grades: 10,11,12  
 2 Semesters Prerequisites: Drawing 1, one  
 1 Credit 2nd level class in the area of focus,  
 and teacher permission  
 Graded: Conventional

This course is designed for the advanced art, video, and photography student. It is individualized to meet each student's needs for skill mastery and self-expression. Students may choose to work in any 2D or 3D medium, or video production. Each student prepares a portfolio for suitable possible advanced placement credit. The instructor provides guidance regarding college applications, scholarships and employment in the field of art. Students will be expected to reach high standards of initiative and performance.

**ADVANCED PLACEMENT PORTFOLIO**

Grades: 11,12  
 2 Semesters Prerequisites: Advanced Studio or  
 1 Credit permission of instructor  
 Graded: Conventional

This course is designed for the advanced art, video, and photography student. It is individualized to meet each student's needs for skill mastery and self-expression. Students may choose to

work in any 2D medium or video production. The instructor provides guidance regarding college applications, scholarships and employment in the field of art. Students will be expected to reach a college level of initiative and performance. Students will have the opportunity to submit a portfolio for college credit

**MUSIC**

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	8533	Symphonic Band	1
9, 10, 11, 12	8534	Wind Symphony	1
9, 10, 11, 12	8535	Wind Ensemble	1
9, 10, 11, 12	8610	Orchestra	1
9, 10, 11, 12	8711	Treble Ensemble	1
9, 10, 11, 12	8771	Concert Choir	1
9, 10, 11, 12	8780	Women's Choral	1
9, 10, 11, 12	8790	Symphonic Choir	1
11, 12	8795	Kilbourne Singers	1
10, 11, 12	8811	AP Music Theory	1

**SYMPHONIC BAND**

Grades: 9, 10, 11, 12  
 2 Semester Prerequisite: Audition or teacher  
 1 Credit recommendation  
 Graded: Conventional

This class is designed to be a place for instrumentalists to receive instruction to continue to further their instrumental skills. Students will be placed in this band through an audition. In addition, there will be a component for beginning instrumentalists that will be taught concurrently by the associate Director of Bands. As beginning students progress, they will be able to join the regular band and perform in concerts. Performances at several public concerts and possibly OMEA sanctioned events highlight this year. Evaluation is based on concert attendance and tests.

**WIND SYMPHONY**

Grades: 9,10,11,12  
 2 Semesters Prerequisite: Audition  
 1 Credit Graded: Conventional

This organization builds on the musical skills mastered in previous years of individual and group study. Appearances at local and state events, including OMEA-sanctioned festivals, highlight this band's performance schedule. The most outstanding musicians are invited to perform in a full orchestra setting. The curriculum focuses on exploring the highest quality band literature published, including many masterpieces performed by collegiate and professional organizations. In addition to earning an academic credit, musicians in this organization earn awards and special recognition for outstanding musical achievement throughout the year. Evaluation is based on individual playing tests, written tests, concert attendance, service credits, and quality of individual performance.

**WIND ENSEMBLE**

2 Semesters  
1 Credit

Grades: 9,10,11,12  
Prerequisite: Audition  
Graded: Conventional

This organization is comprised of the most advanced band musicians in the high school. Appearances at local, state and national events, including OMEA sanctioned festivals, highlight this band's performance schedule. This group performs literature that is challenging for the advanced musician. The ensemble plays music of the highest quality, including masterpieces performed by collegiate and professional organizations. Emphasis is placed on chamber music and 20th century literature. Outstanding guest conductors and soloists annually appear in concert with the Wind Symphony. In addition to earning an academic credit, musicians in this organization earn awards and special recognition for outstanding musical achievement throughout the year. Evaluation is based on individual playing tests, written tests, concert critiques, service credits, and quality of individual performance.

**ORCHESTRA**

2 Semesters  
1 Credit

Grades: 9, 10,11,12  
Prerequisite: Freshman Orchestra/  
Audition or Instructor's Approval  
Graded: Conventional

Orchestra is a full year course providing instruction in technical development, musicianship, ensemble training and interpretive skills as it applies to each student's instrument, as well as providing performance opportunities.

Selection of literature is based upon technical, musical and performance considerations. During any particular year, the group performs a wide variety of music from all historical time periods in music. While one period may be stressed for its contribution to individual skills, another may receive attention in terms of development of a particular element of musicianship or ensemble style. In addition to regular rehearsals, chamber ensembles and individual technical development is part of the class instruction. Advanced students and section leaders will have additional responsibilities for rehearsals and for participating in musical theater when the opportunity is available. This course is not offered on a semester basis. Evaluation is based on playing tests, homework, tests and quizzes, performance and extra rehearsal attendance, equipment accessories and string replacement.

**ADVANCED PLACEMENT MUSIC THEORY**

2 Semesters  
1 Credit

Grades: 10,11,12  
Prerequisite: None  
Graded: Conventional

Advanced Placement Music Theory is an advanced academic course designed to study the fundamentals of music. It is for those students who plan to study music in college or who plan to make a career in music. Others interested in the elements and structure of music are also welcome. The course provides the student with a complete background through which to enjoy

and understand music more fully. Composition, harmony, and ear training included. Evaluation is based on testing, individual assignments, projects. Students are expected to take the Advanced Placement test.

**CO-CURRICULAR ENSEMBLES**

All students registered for a curricular band and orchestra listed above and below are encouraged to participate in the co-curricular ensembles, which include Marching Band, Jazz Band, Pep Band, Percussion Ensemble, and Pit Orchestra. These organizations are seasonal. The marching band is active during the football season. The jazz band starts in November and performs through the month of May. The pep band performs during the winter sports season. The pit orchestra performs at the school musical. Students must be members of curricular bands to be eligible for membership in co-curricular bands.

**TREBLE ENSEMBLE**

2 Semesters  
1 Credit

Grade: 9,10,11,12  
Prerequisite: None  
Graded: Conventional

This musical organization is open to female voices in the ninth through twelfth grades, regardless of their past experience in vocal music. Vocal production, correct breathing, good diction, correct posture and the carrying of an independent vocal part are stressed in this course. This group performs in regular concerts and some outside appearances. Due to the nature of the subject matter and performance commitments of the choir, students are requested to make every effort to schedule this class for the entire school year. Evaluation will be achieved through concert attendance, singing and written tests and progress of individual performance.

**CONCERT CHOIR**

2 Semesters  
1 Credit

Grades: 9,10,11,12  
Prerequisite: None  
Graded: Conventional

This course is open to male voices. Vocal production, correct breathing, good diction, correct posture and the carrying of an independent vocal part are stressed in this course. Regular concerts and outside appearances each year are some of the class's activities. Literature performed is based on the particular abilities of the students in the class. Due to the nature of the subject matter and performance commitment of the choir, students are requested to make every effort to schedule this class for the entire school year. Evaluation is achieved through concert attendance, , singing and written tests and progress of individual vocal performance.

**SYMPHONIC CHOIR**

2 Semesters  
1 Credit  
Grades: 9,10,11,12  
Prerequisite: Audition  
Graded: Conventional

This course is comprised of female voices that are selected from auditions held the previous spring prior to registration. This select vocal group works towards the highest standards of achievement in vocal performance. Experience in singing is augmented by various appearances. Class experiences include singing in small ensembles made up of different members of the entire group. Due to the level of individual vocal performance and number of public performances, students must make every effort to schedule this class for the entire school year. Evaluation will be achieved through concert attendance, singing and written tests and progress of individual performance.

**KILBOURNE SINGERS**

2 Semesters  
1 Credit  
Grades: 10,11,12  
Prerequisite: Audition  
Graded: Conventional

This musical organization is open to the most advanced male and female choir members in the high school. These students will be working on extremely challenging choral literature, major works and commissioned pieces. Appearances at local, state and national events, including OMEA sanctioned festivals, a yearly concert tour and college visits highlight this choral ensemble. Evaluation will be achieved through concert attendance, and individual performance.

***THEATER***

**COURSES OFFERED**

Grade	Course #	Course Title	Credits
9, 10, 11, 12	0890	Applied English (Stagecraft)	1/2
9, 10, 11, 12	8620	Theater Arts Survey	1/2
9, 10, 11, 12	8630	Theater Repertory	1/2

**THEATER ARTS SURVEY**

1 Semester  
1/2 Credit - Fine Arts\*  
Grades: 9,10,11,12  
Prerequisite: None  
Graded: Conventional

Be a part of the stage! Learn acting, theater history, the basic principles of acting and directing, and the accompanying technical fields of costume, properties and publicity design. Students prepare and perform one-act plays and/or scenes. The course is designed to give the general student a complete production experience and increase his appreciation of theater arts. Students will understand and appreciate the historical, social, political and cultural contexts of drama/theater in societies both past and present and also recognize the relationship between concepts and skills learned through drama/theater with knowledge learned in other curricular subjects, life experiences and potential careers in and outside the arts. Students will recognize the benefits of lifelong learning in drama/theater. The course will also serve as

a prerequisite for more advanced work in theater production. Evaluation is based on student performance, rehearsal participation and written assignments.

\*This class meets .50 of the 1.0 Fine Arts Credit requirement.

**THEATER REPERTORY**

1 Semester  
1/2 Credit - Fine Arts\*  
(repeatable)  
Grades: 9,10,11,12  
Prerequisite: Theater Arts Survey, & Drama Teacher's Recommendation and/or Audition  
Graded: Conventional

Each student is a member of a play production company, cooperating with others in performance and technical preparation of plays produced for the public. Students practice and expand performance and technical skills. Through repetition of the course, students will be exposed to a wide variety of theatrical works and genres as they learn to appreciate the historical, social and cultural context in the past and present. Students seeking company membership must audition second semester of the previous school year or receive recommendation from the theater teacher. Students recognize the relationship between concepts and skills learned through drama/theater with knowledge learned in other curricular subjects, life experiences and potential careers in and outside the arts. Students recognize the benefits of lifelong learning in drama/theater. Evaluation is based on student performance, rehearsal participation and written assignments. Time outside the regular school day is required and every attempt is made to schedule around other co-curricular activities.

This class meets .50 of the 1.0 Fine Arts Credit requirement.

**APPLIED ENGLISH**

(formerly known as Stagecraft)  
1 Semester  
1/2 Credit - English\*  
(repeatable)  
Grades: 9,10,11,12  
Prerequisite: Strong work ethic & desire to solve theatrical challenges  
Graded: Conventional

As students analyze various elements of scripts, they bring to life the world of a play through application of lighting, set design, set construction and sound design to meet the demands of a playwright's words. Students learn script analysis for technical theater, stage construction, lighting, sound, and operation of theaters, and apply the skills to public performances in conjunction with Theater Repertory students. Students are evaluated on their completion of required hours regardless of semester, a journal of experiences, and independent projects. The successful theater production student has a strong work ethic and a desire to solve theatrical challenges and problem solve in a self-directed manner. Time outside the regular school day is required in application of the analysis and technical skills and every attempt is made to schedule around other co-curricular activities.

\* Does not meet English graduation requirements and/or senior English Requirement, however, it will meet part of the required General Electives credit.

**WELLNESS DEPARTMENT**

The Worthington School District Wellness program promotes physical, social, and mental well-being. All Worthington Kilbourne students are required to complete a 1/2 credit of Health and 1/2 credit of either Wellness for Life, Strength Training, Flex and Tone, or Flexible Training courses. Health is usually completed during the 10th grade year.

**COURSES OFFERED**

Grade	Course #	Course Title	Credit
9, 10, 11, 12	8920	Wellness 4 Life	1/4
9, 10, 11, 12	8941	Strength Training	1/4
9, 10, 11, 12	8950	Health	1/2
9, 10, 11, 12	8953	Flex and Tone	1/4
9, 10, 11, 12	8963	Intro to Musc.Anatomy/Phys.	1/2
10, 11, 12	8960	Athletic Training	1/2

**WELLNESS 4 LIFE**

Grade: 9-12(R)  
 Prerequisite: None  
 Graded: Conventional  
 1 Semester  
 1/4 Credit

The curriculum at this level is designed to have students participate in a combination of non-traditional physical activities and traditional team sports in a coeducational setting. Fitness records will be maintained through various assessments by both teachers and students using heart monitors, pedometers, etc. Students are required to wear athletic clothing appropriate to the activity. Evaluation will be based on meeting the minimum state required hours of participation, dressing appropriately, skill and fitness assessments, written tests and quizzes.

**STRENGTH TRAINING**

Grade: 9-12(R)  
 Prerequisite: None  
 Graded: Conventional  
 1 Semester  
 1/4 Credit

This course is an alternative to Wellness 4 Life - Level Two and concentrates on the six components of total fitness: muscular strength, muscular endurance, flexibility, body composition, and nutrition with an emphasis on muscular strength. Students will have a core set of lifts used by all but the program will be individualized to meet student needs and goals. Students exercise four days per week and engage in weekly class discussions. Fitness records will be maintained through various assessments by both teachers and students using heart monitors, pedometers, etc. Students are required to wear athletic clothing appropriate to the activity. Evaluation will be based on meeting the minimum state required hours of participation, dressing appropriately, skill and fitness assessments, written tests and quizzes.

**HEALTH EDUCATION**

Grade: 9, 10(R),11, 12  
 Prerequisite: None  
 Graded: Conventional  
 1 Semester  
 1/2 Credit

The intent of the Health course is to help young people make independent, informed decisions concerning their physical, mental, and social well being. Students are encouraged to discover their unique capabilities and to assume responsibility for

developing attitudes and patterns of behavior that will promote a full and satisfying life. Curriculum includes mental and emotional health, human growth and development including life cycle and sexuality, safety and risk reduction including first aid and CPR, alcohol, tobacco and other drugs, and nutrition and exercise. Individual, family, and community concerns are considered in relation to the factors affecting health in today's world. The physical, social, emotional, and psychological development of youth is explored. Due to the graduation requirement, all sophomores and any junior or senior transfer student who has not previously received credit in health must complete one semester of Health.

**FLEX AND TONE**

Grade: 9, 10, 11, 12(R)  
 Prerequisite: None  
 Graded: Conventional  
 1 Semester  
 1/4 Credit

This course adds another option to meeting the PE credit requirement for graduation. Students will alternate days of full body workouts in the wight room with flexibility training in the gym performing Yoga. It provides a well-rounded approach to fitness that students can carry into their adult lives. Progress will assessed regularly through both activities and the . Fitness records will be maintained through various assessments by both teachers and students using heart monitors, pedometers, etc. Students are required to wear athletic clothing appropriate to the activity. Evaluation will be based on meeting the minimum state required hours of participation, dressing appropriately, skill and fitness assessments, written tests and quizzes.

**INTRODUCTION TO MUSCULOSKELETAL ANATOMY/PHYSIOLOGY**

Grade: 9, 10, 11, 12  
 Prerequisite: None  
 Graded: Conventional  
 1 Semester  
 1/2 Credit

This course is an introduction to human musculoskeletal studies. In this course you will be learning to identify the bones, muscles, and the physiological processes that enable these structures to function and produce movement. Instructional activities will emphasize visual learning utilizing models, software, self application and diagramming. This course provides an opportunity for students considering a career in the medical sciences to establish a basic foundation of human structure. Although a prerequisite to Athletic Training, this course does not include the expectation to pursue athletic training.

Grades: 10, 11, 12

1 Semester  
1/2 Credit

Prerequisite: Intro to Musculoskeletal  
Anatomy and permission of instructor  
Graded: Conventional

In this course students will be able to apply the basic principles of anatomy and physiology learned in Introduction to Musculoskeletal anatomy to the human body such as 1.) injury evaluation, 2.) physiological response to trauma, and 3.) advanced rehabilitation techniques. This class will also explore medical field career choices such as physician, nurse, athletic trainer, physical therapist, occupational therapist, radiologist and exercise physiologist. Students must be able to stay on task as content areas of interest such as nutrition, ergogenic aids (e.g., steroids), and controversial issues will be explored independently. This class will be evaluated through homework, quizzes, research papers, and clinical practice.



## Introduction to Delaware Area Career Center

Mary Beth Freeman, Superintendent  
Tammy Hall, Director of Secondary Operations  
Kris Lucas, South Campus Director  
Chad Williams, North Campus Director

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South Campus  
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Mission: The Delaware Area Career Center, in partnership with community, is an innovative model for developing lifelong learners, quality leaders, and critical thinkers for the dynamic and global environment.

### North Campus Programs

Automotive Collision Technology  
Automotive Technology  
CBI 9 & 10\*<sup>^</sup>  
Construction Technology  
Cosmetology+  
Culinary Arts  
Early Childhood Education  
Fire Service Training  
Landscaping and Turfgrass Management  
Power Line Technician  
Power Sports and Diesel Technology  
Welding and Sheet Metal Fabrication

### South Campus Programs

App Development/Programming  
Bioscience  
Dental Assisting  
Digital Design  
Engineering Technology\*\*  
Food Service<sup>^</sup>  
Health Technology  
Law Enforcement  
Networking  
Pharmacy Technician++

### Off-Site Programs

Hospitality<sup>^</sup> at Willowbrook Christian Village  
Columbus Zoo and Aquarium School  
Equine Science at the Delaware County Fairgrounds  
Wildlife and Resource Management at Camp Lazarus

#### Key

+ Full day only program

++ Senior only program

\* One-year program.

<sup>^</sup> Counselor recommendation preferred.

\*\* Three-year program beginning in the 10th grade

The Delaware Area Career Center (DACC) affirms that equal opportunities are offered without regard to race, color, religion, sex, military status, national origin, disability, age, and ancestry of person. For more information, visit our website at [www.DelawareAreaCC.org](http://www.DelawareAreaCC.org).

**DACC** | DELAWARE AREA™  
CAREER CENTER



Everyone wants a job someday.



A good education is your first step.

## What else do you need?

### Practical experience

Books will give you answers.  
Experience brings it to life.



### Industry credentials

Become an expert in your area of study and get noticed.



### Professional contacts

Meet the people you want to work for now and show them why you're worth it.



## Stand out from the crowd on your

College  
Essays

Scholarship  
Applications

Resume

## Career and Technical Lab Programs

### Agricultural and Environmental Systems

#### Columbus Zoo & Aquarium School

- Experience the excitement, independence and demand of authentic animal field research.
- Apply science and math to produce a college level thesis.
- Work with zoo professionals and apply animal knowledge.

Career Focus: Prepared for further education in any science or conservation field.

#### Equine Science

- Work on-site at stables and track with professionals in the daily care, health, and training of horses
- Explore the science of veterinary medicine for horses including clinical procedures, terminology, and disease prevention
- Practice sound stable management

Career Focus: Prepared for immediate employment, licensure, and further education

#### Landscaping and Turf Management

- Design, install, and maintain unique residential and commercial landscapes
- Apply an extensive knowledge of plants and creative design elements to construct patios, decks, and recreational spaces
- Explore business management and ownership as a lawn care specialist

Career Focus: Prepared for immediate employment and further education

#### Power Sports & Diesel Technology

- Troubleshoot, repair, overhaul, and assemble new and used gas and diesel power-driven machinery, equipment, and small engines
- Service air-cooled engines, lawn mowers, farm tractors, and motor cycles
- Design, create, and produce parts using plasma cutting technology

Career Focus: Prepared for further education and immediate employment in mechanized equipment maintenance

#### Wildlife & Resource Management

- Build and maintain a wetland habitat
- Investigate and apply alternative energy solutions
- Research and propose solutions for environmental issues

Career Focus: Prepared for further education in conservation, environmental science, or other science related fields

## Construction Center

### Construction Technology

- Construct a residential home from the ground up
- Interpret blue prints and specifications to build structures from rough lumber to finish grade
- Operate a wide range of construction tools

Career Focus: Prepared for immediate employment in construction, advanced certifications, and further education

## Education and Training

### Early Childhood Education

- Teach in a preschool and infant/toddler daycare center
- Research, create, and deliver developmentally appropriate materials for young children
- Plan activities that engage children by utilizing effective learning techniques

Career Focus: Prepared for college in a teaching career, advanced certifications, and immediate employment as a preschool aide

## Health & Public Safety

### Bioscience

- Design and implement scientific research projects using knowledge gained from this program such as - Bioethics for Good Laboratory Practices and applying experiments/assays that explore Molecular Biology and Anatomy.
- Ability to create data, correctly interpret data, and be able to present data that there is a clear understanding of the experiment(s).
- Complete lab/clinic hours

Career Focus: Prepared for an active role in the Bioscience field.

### Dental Assisting

- Take x-rays and develop chair side etiquette as part of a dental team
- Create impressions and molds
- Use knowledge of anatomy, physiology and dental terminology to educate and care for patients

Career Focus: Prepared for immediate employment, advanced certifications

### Fire Service Training

- Experience the thrill of saving lives and fighting fires
- Operate a wide-range of firefighting and life-saving equipment
- Develop your mind and body through rigorous mental and physical training

Career Focus: Prepared for immediate employment as a firefighter/EMT, jump start on Paramedic certification, and further education

### Health Technology

- Apply advanced health care concepts, processes and diagnostic procedures in a clinical environment
- Emphasis on medical terminology, anatomy, physiology, and infection control
- Develop professional work ethic, medical skills, and patient/client care and confidentiality

Career Focus: Prepared for college medical programs and immediate employment

### Law Enforcement

- Use investigative techniques to solve crime scenarios and to mediate and resolve conflicts
- Develop your mind and body using self-defense tactics and fitness training
- Research and analyze current trends and issues in public safety

Career Focus: Prepared for immediate employment, advanced certification, and further education

### Pharmacy Technician

- Prescription protocol
- Medication and drug laws
- Medical math and terminology

Career Focus: Pharmacy Technician, Pharmacy Aide, Pharmacist

## Human Services

### Cosmetology

- Evaluate, recommend and create hair designs
- Use advanced techniques to deliver a wide range of skin care and nail treatments
- Experience a full-service interactive salon environment

Career Focus: Prepared for immediate employment in a salon/day spa, advanced licensure, and further education

### Culinary Arts

- Create meals, cakes, and pastries with artistic presentation
- Plan, prepare, and serve meals for upscale events and casual dining
- Operate a full service restaurant open to the public

Career Focus: Prepared for professional culinary programs, immediate employment, and further education

### Food Service:

- Prepare and serve food according to entry level catering and restaurant standards
- Plan menus, create shopping lists, and acquire supplies within the community
- Identify, sanitize, and safely use equipment in a commercial kitchen

Career Focus: Prepared for immediate employment

### Hospitality

- Work at Willow Brook Christian Communities performing a variety of support functions
- Team with hospitality professionals to provide customer service
- Develop critical employability and job attainment skills

Career Focus: Prepared for immediate employment or Project Search

## Information Technology

### App Development/Programming

- Learn how to create a user interface
- Become familiar with common programming languages such as Java, C++ and HTML
- Use analytical skills to determine users' needs and design an app to suit them

Career Focus: Mobile app developer, programmer

### Digital Design

- Conceive, design, and deliver unique interactive content with animation, graphics, audio and visual
- Design, install, and troubleshoot complex computer and audio/visual network systems
- Use the same hardware and software as information technology professionals

Career Focus: Graphic designer, photographer, web developer, videographer

### Networking

- Set up servers, workstations and networks with Microsoft software
- Design, install, and troubleshoot Microsoft technologies
- Use the same hardware and software as Microsoft information technology professionals

Prepared for certifications, immediate employment and college scholarships

## Manufacturing Center

### Engineering Technology

- Learn the engineering design process
- Read and interpret technical drawings
- Electro-mechanical components and systems
- Computer-integrated manufacturing

Career Focus: Prepared for immediate employment as an entry-level engineer.

### Power Line Technician

- Study to be a Power Line Technician
- Complete all requirements for the entry level position of a power line technician
- Earn qualifications necessary to climb poles and begin work in the field
- Study state approved power curriculum

Career Focus: Prepared for immediate employment as a ground worker at any electric company

### Welding and Sheet Metal Fabrication

- Design, engineer, build, and troubleshoot complex manufacturing solutions for actual clients
- Interpret blueprints and specifications using math and computer technology
- Develop the strength, work ethic, and stamina necessary for a career in fabrication

Career Focus: Prepared for entry-level welding certification, immediate employment as an apprentice, and further education

## Early High School Opportunities

### CBI 9 & 10

- Introduction to personal, professional, and academic strategies for success centered on The 7 HABITS of Highly Effective TEENS by Stephen Covey.
- Create and implement a career plan
- Explore a wide-range of career tech programs while receiving academic support

Career Focus: Prepared to continue high school and qualify for a career tech program

## Transportation Center

### Automotive Collision Technology

- Learn how to repair and refinish a damaged vehicles
- Create damage analysis and estimate for repair costs
- Mig welding, sheet metal repair and fabrication
- Sanding surfaces and spraying basecoat/clear coat automotive paint.

Career Focus: Prepared for immediate employment as Collision Repair Technician/Painte Refinisher, Insurance Adjustor, Estimator or Collision Repair Frame Technician.

### Automotive Technology

- Diagnose, maintain, and repair a wide-range of vehicles
- Use the same equipment and techniques as professional technicians
- Work side-by-side with Master Technicians at local automotive service centers

Career Focus: Prepared for college in an advanced auto tech program or related field and immediate employment

## Academic Course Descriptions

### Science

Advanced Chemistry\*  
Anatomy & Physiology+  
Biology  
Chemistry  
Forensics+  
Introduction to Physics  
Material Science  
Physics  
Physical Geology

### Mathematics

Algebra II  
Calculus  
Geometry  
Pre-Calculus  
Statistics+  
Transition to College Math

### Social Studies

American History  
Financial Literacy/Economics  
Psychology  
Sociology  
U.S. Government  
World History

### English

English 10+  
English 11  
English 12\*

\*Dual credit option.  
+Offered only to students enrolled in specific career technical programs.