

# HILLSBORO HIGH SCHOOL 2017-2018 COURSE DESCRIPTIONS

## GRADUATION REQUIREMENTS

22 Credits are required and must include the following:

Credits	Course
4	English
3	Math (Algebra 1 and Geometry required)
2	Science (Class of 2018 & 2019)
*3	Science (*Beginning with Class of 2020)
2	Social Science (American History and Government and 0.5 elective credit)
0.5	Consumer Education or equivalent (Adult Living)
0.5	Health
3.5	Physical Education
1	Elective (Music, Art, Foreign Language, Vocational)

In addition, all students must take and receive a passing grade on the Constitution test. Students are also required by law to take the SAT SCHOOL DAY EXAM and the ILLINOIS SCIENCE ASSESSMENT as a condition of receiving a high school diploma.

## CREDIT FOR ALTERNATIVE COURSES AND PROGRAMS

Students may earn a maximum of 2 credits toward graduation through school approved online providers (BYU High School, Illinois Virtual H.S., etc). Usually these courses are reserved for fourth or fifth year students. The student is responsible for all fees associated with these courses. Student must receive approval before course(s) can be counted as high school credit. Any exceptions to the guidelines above must be approved by the building principal and/or the superintendent.

## COLLEGE COURSES

A student who successfully completes a community college or university course may receive high school credit under the following circumstances

1. Must be a senior in good standing
2. The course is not offered in the high school curriculum
3. The course is approved in advance by the high school guidance counselor and the high school principal

4. Student assumes responsibility for all fees
5. A maximum of 2 units of credit may be counted toward graduation.
- 6.

### GRADE CLASSIFICATION

Students are classified according to credits earned.

Freshmen	0 – 4.5 Credits	Sophomores	5 - 10.5 Credits
Juniors	11 – 14.5 Credits	Seniors	15 or more Credits

### DUAL CREDIT CLASSES

Students must qualify to take a DUAL CREDIT CLASS earn college credit through Lincoln Land Community College.

<b>HHS Course Name</b>	SLU 1818 Credit or LLCC Dual Credit / OKAW – KASKASKIA COLLEGE/
Building Trades	BDM 102 Introduction to Construction Occupation (LLCC, 4.0 credit hrs) BDM 106 Basic Carpentry I (LLCC, 4.0 credit hrs)
English 1500	ENGL 1500 - The Process of Composition (SLU 1818, 3.0 Credit Hrs)
English 1900	ENGL 1900 – Adv. Strat. of Rhetoric and Research (SLU 1818 SLU, 3.0 Credit Hrs)
English 2250	ENGL 2250 - Conflict, Social Justice and Literature (SLU 1818, 3.0 Credit Hrs)
Health Careers	NAS 101 Basic Nurse Assistant (6.5 credit hrs)

### WEIGHTED CLASSES

Students who make a 'C' or higher in a weighted class will have 0.035 added to their GPA for each semester of each weighted class.

Junior Year:	English 2250
Senior Year:	Advanced Placement (AP) Chemistry      Advanced Placement (AP) Calculus English 1500/1900      Spanish 4

## EARLY GRADUATION

While early graduation is not recommended for the majority of students, it is an option for a select few. Students may graduate early, after 7 semesters if the following requirements have been met:

1. Applications must be submitted to the guidance office prior to the student's 7<sup>th</sup> semester, and approved by the high school principal.
2. A conference with the student's parents and the guidance counselor is held.
3. The student must have completed all requirements for graduation as set forth by the Board of Education and the Illinois State Board of Education.

Students who choose to graduate early are permitted to return to participate in the graduation ceremony or their diploma may be mailed to them.

Early graduates must take full responsibility to make arrangements with the high school office for anything pertaining to the graduation ceremony (announcements, cap and gown, etc).

## **AGRICULTURE**

### **EXPLORING THE FUNDAMENTALS OF AGRICULTURE**

OPEN TO GRADES: 9- 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 year  
 CREDIT: 1 credit  
 COURSE DESCRIPTION:

Exploring the Fundamentals of Agriculture is a yearlong course that is highly recommended as a prerequisite and foundation for all other agricultural classes. The nature of this course is to provide students with an introduction to careers and the fundamentals of agricultural science and business. Areas to be covered include: agricultural literacy, its importance and career opportunities, plant and soil science, environmental science, horticulture and landscape management, agricultural biotechnology, agricultural science and business tools and equipment, basic principles of and employability in the agricultural/horticultural industry, basic agribusiness principles and skills, developing leadership skills in agriculture, and supervised experience in agriculture/horticulture purposes and procedures. Student learning objectives are defined. Instruction includes not only agriculture education standards but many academic standards are included through the use of “hands-on” problem-solving individual and team activities.

### **ANIMAL ANATOMY and PHYSIOLOGY**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Biology or Chemistry AND completion of Algebra OR concur enrollment in any listed class or permission by teacher  
 LENGTH OF COURSE: 1 semester  
 CREDIT: 0.5 credit  
 COURSE DESCRIPTION:

This course provides a study of anatomy and physiology of small and large animals; proper health maintenance; sanitation and the symptoms, treatments and prevention of common diseases. Course work will include animal nutrition, safe handling and restraint and the control of parasites and diseases. Student learning objectives are defined. Instruction includes not only agriculture education standards but many academic standards are included through the use of “hands-on” problem-solving individual and team activities. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

### **NATURAL RESOURCE CONSERVATION**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Exploring the Fundamentals of Agriculture OR permission by teacher  
 LENGTH OF COURSE: 1 semester/Fall  
 CREDIT: 0.5 credit  
 COURSE DESCRIPTION:

Natural Resource Conservation introduces agriculture students to concepts of natural resource science and management. This will include ecological concepts and scientific principles, rangeland management, fire ecology, GPS and GIS, fish and wild ecology, forestry, renewable and non-renewable resources. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs. The appropriate use of technology and industry standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment in this field.

### **WILDLIFE MANAGEMENT and AQUACULTURE**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Exploring the Fundamentals of Agriculture OR permission by teacher  
 LENGTH OF COURSE: 1 semester/Spring  
 CREDIT: 0.5 credit  
 COURSE DESCRIPTION:

This course develops management and conservation skills in understanding the connection between agriculture and wildlife management. Student knowledge and skills are developed in: fish, wildlife, and forestry management and conservation; and exploring outdoor recreational enterprises. Hunting and fishing as a sport, growing and managing tree forests, and outdoor safety education will be featured. Students will also study various types of fish, including the lab work or raising a crop of fish during the school year. Career exploration will be discussed including: park ranger, game warden, campground manager, forester, conservation officer, wildlife manager, and related occupations. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

### **BIOLOGICAL SCIENCE APPLICATIONS in AGRICULTURE- PLANT SCIENCE**

OPEN TO GRADES:	10, 11, 12
PREREQUISITES:	Exploring the Fundamentals of Agriculture OR permission by teacher
LENGTH OF COURSE:	1 semester/Spring
CREDIT:	0.5 credit
COURSE DESCRIPTION:	

This course is designed to reinforce and extend students understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of plant growth and management in agriculture and the specific biological science concepts that govern management decisions. Topics of study are in the areas of initiating plant growth – germination, plant sensory mechanisms, enzyme action, absorption, and managing plant growth – photosynthesis, respiration, translocation, metabolism, and growth regulation. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

### **BIOLOGICAL SCIENCE APPLICATIONS in AGRICULTURE- ANIMAL SCIENCE**

OPEN TO GRADES:	10, 11, 12
PREREQUISITES:	Exploring the Fundamentals of Agriculture OR permission by teacher
LENGTH OF COURSE:	1 semester/Fall
CREDIT:	0.5 credit
COURSE DESCRIPTION:	

This course is designed to reinforce and extend students understanding of science by associating scientific principles and concepts with relevant applications in agriculture. Students will examine major phases of animal agriculture and specific biological science concepts that govern management decisions in the animal industry. Topics of study are in the areas of growth and development of animals – embryology, ethology, nutrition, immunity systems, and processing animal products – preservation, fermentation, and pasteurization. The course will be valuable preparation for further education and will increase the relevance of science through the applied setting of agriculture by enhancing literacy in science and the scientific process. Improving computer and workplace skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

### **VETERINARY SCIENCE and TECHNOLOGY**

**OPEN TO GRADES:** 11, 12  
**PREREQUISITES:** Biology or Chemistry AND completion of Animal Anatomy/Physiology AND Algebra or concur enrollment in any listed class OR permission by teacher  
**LENGTH OF COURSE:** 1 semester  
**CREDIT:** 0.5 credit  
**COURSE DESCRIPTION:**

This course provides information, hands on laboratory activities, and skills in the areas of Veterinarian Science and Technology, mammalian production, scientific investigation, nutrition, mitosis, meiosis, respiration and genetics. The student will gain practical experience in veterinary medicine by conducting hands-on activities with livestock and will have the opportunity to investigate the field of veterinary medicine. Emphasis is placed on mammals that are most important to human culture as we know it. Emphasis will be placed on skills that develop and apply rational and creative thinking, inquiry, and observation that will lead to analysis and write-ups. An essential part of this course will be leadership activities and Supervised Agriculture Experience Programs.

### **AGRICULTURE METAL FABRICATION**

**OPEN TO GRADES:** 11, 12  
**PREREQUISITES:** Exploring the Fundamentals of agriculture OR permission by teacher  
**LENGTH OF COURSE:** 1 semester/Fall  
**CREDIT:** 0.5 credit  
**COURSE DESCRIPTION:**

This course will emphasize the development of basic welding and metalworking skills necessary to succeed in agricultural careers in the agricultural metal fabrication industry. Topics of instruction include: metal identification and properties, metal preparation, use of oxy-acetylene torch, plasma cutting and cutting operations, arc welding, MIG welding, TIG welding, and project design and construction. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervise Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**AGRICULTURE CONSTRUCTION TECHNOLOGY (Offered 2016-2017)**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Exploring the Fundamentals of Agriculture OR permission by teacher  
 LENGTH OF COURSE: 1 semester/Spring  
 CREDIT: 0.5 credit  
 COURSE DESCRIPTION:

This advanced course focuses on the knowledge, hands-on skills, and work place skills applicable to construction in the agricultural industry. Major units of instruction include: personal safety, hand tools, power tools, blue print reading, and surveying, construction skills in carpentry, plumbing, electricity, concrete, block laying, drywall and painting. Careers such as agricultural engineers, carpenter, plumber, electrician, concrete and block layers, finishers, safety specialists, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

**AGRICULTURE MACHINERY REPAIR**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Exploring the Fundamentals of Agriculture OR permission by teacher  
 LENGTH OF COURSE: 1 semester/Spring  
 CREDIT: 0.5 credit  
 COURSE DESCRIPTION:

This comprehensive machinery service course concentrates on the following areas: using service manuals, electrical applications for agricultural equipment, and fundamentals of multi-cylinder engines, reconditioning and repairing agricultural equipment, assembling and adjusting agricultural equipment, organization and management of agricultural machinery dealerships, human relations, and sales techniques. Careers such as agricultural equipment salesperson, mechanic, parts manager, sales manager, service technician, and other related occupations will be examined. Improving workplace and computer skills will be a focus. Participation in FFA organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.



### **SUPERVISED AGRICULTURE EXPERIENCE I**

OPEN TO GRADES:	11, 12
PREREQUISITES:	Exploring the Fundamentals of Agriculture
LENGTH OF COURSE:	1 year
CREDIT:	1 credit
COURSE DESCRIPTION:	

This course is designed to establish knowledge and skills in various agricultural careers. Students will gain credit by establishing a project at their home, at a local business, or at their school usually after normal school hours. Example projects may include, but are not limited to: working at a garden center, raising vegetables/grain/livestock, conducting agriscience experiments in a greenhouse, and training horses at a stable. Students will be required to verify their experiences by keeping written or computerized records including: business, agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home or place of employment. SAE records should be evaluated at least once per month. In addition, SAE lessons are integrated in each agricultural course. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

### **SUPERVISED AGRICULTURE EXPERIENCE II**

OPEN TO GRADES:	12
PREREQUISITES:	Exploring the Fundamentals of Agriculture
LENGTH OF COURSE:	1 year
CREDIT:	1 credit
COURSE DESCRIPTION:	

This course is designed to improve and expand knowledge and skills in various agricultural careers. Students will gain credit by continuing a project at their home, at a local business, or at their school usually after normal school hours. Students are encouraged to add additional projects, experiences, scope, and growth involving managerial and decision making skills. Students will be required to verify their experiences by keeping written or computerized records including: business agreements, budgets, inventories, daily activities, hours worked, income and expenses, total earnings, depreciation, and net worth. Instructor supervision will be conducted to the student's home or place of employment. SAE records should be evaluated at least once per month. In addition, SAE lessons are integrated into each agricultural course. SAE participation can lead to fulltime employment, scholarships, and awards through the FFA.

## BUSINESS DEPARTMENT

### ACCOUNTING I

OPEN TO GRADES: 10, 11, 12  
PREREQUISITES: None  
LENGTH OF COURSE: 1 Year  
CREDIT: 1 Credit/Elective  
COURSE DESCRIPTION:

Accounting I is designed to give the student a thorough knowledge of basic accounting principles for personal use, entry-level accounting positions, and further study in accounting.

### ACCOUNTING II

OPEN TO GRADES: 11, 12  
PREREQUISITES: "C" or better in Accounting I  
LENGTH OF COURSE: 1 Year  
CREDIT: 1 Credit/Elective  
COURSE DESCRIPTION:

Accounting II will briefly review the concepts covered in Accounting I before continuing on with new concepts and techniques that a merchandise business would use in financial record-keeping. Additional ideas will include depreciation of assets, covering the finances associated with business partnerships, and factoring internet sales into a business's revenue stream. Additional programs will be used to create individual accounting programs.

**BUSINESS TECHNOLOGY AND CONCEPTS**

OPEN TO GRADES: 9, 10, 11, 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

Business Technology and Concepts is an intermediate level course using the Microsoft Office Suite, G-Suite and Adobe products with Photoshop software. Hands on experience utilizing formatting skills in word processing, spreadsheet, database, presentation software, e-mail, Internet and integration concepts will be utilized in this class. In addition, apps, extensions and internet sites such as GoAnimate, MovieMaker, iMovie, Prezi, Audacity and more will be worked into assignments to produce professional business documents. Collaboration projects and individual work along with a look at careers and colleges, scholarships, resumes, budgeting, and more will form transferable and employable skills needed throughout high school, college, and the work environment. The course is a prerequisite for most classes offered in the Business Education Department.

**CONSUMER EDUCATION**

OPEN TO GRADES: 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit (Meets state graduation requirement)  
 COURSE DESCRIPTION:

This course meets the graduation requirements for Consumer Economics. This is a practical application course and is designed to provide individualized experiences which will lead to wise consumer practices and rational decision making skills. In addition, students will study financial literacy including: banking, budgeting, saving, investing, transportation, housing, higher education choices, and the wise use of credit.

**INFORMATION PROCESSING A**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Computer Applications  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTIONS:

Information Processing A is designed to teach students advanced level concepts and features in Word and PowerPoint. In Word, students will work on collaboration of documents, creating full reference documents (with table of contents and index pages) and integrate advanced online features in the program. In PowerPoint, student will create slide show templates, utilize various other forms of PowerPoint outside of the slideshow, enhance presentations with advanced graphical elements and content from outside sources, and create photo albums to be used for video presentations. This class is designed for students with an advanced understanding of the Word and PowerPoint programs.

**INFORMATION PROCESSING B**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Computer Applications  
 LENGTH OF COURSE: 1 semester  
 CREDIT: 0.5 credit/elective  
 COURSE DESCRIPTION:

Information Processing B will explore the more advanced level of Excel and Access. In Excel, students will look at PivotTable and PivotChart reports, advanced formulas and problem solving functions, using Macros, and collaborative features and spreadsheets. In Access, students will look at Macros, advanced layouts, administration of database, using SQL, and advanced design features of a database. This class is designed for students with an advanced understanding of the Excel and Access programs.

**MARKETING**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This course is designed to provide students with an introduction into the business world and will greatly benefit any student looking to pursue further education or a career in business. Topics that will be covered range from economics, management, production, and advertising. The class will dedicate time for healthy discussion on how marketing can be integrated in many facets of the world.

**A.P. COMPUTER SCIENCE PRINCIPLES**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: C+ or better in Business Technology and concepts, successfully completed or successfully enrolled in Algebra II, and instructor permission.  
 LENGTH OF COURSE: 1 year  
 CREDIT: 1.0 Credit/Elective  
 COURSE DESCRIPTION:

AP Computer Science Principles introduces students to the foundational concepts of the field and challenges them to explore how computing and technology can impact the world. Whether it's 3-D animation, engineering, music, app development, medicine, visual design, robotics, or political analysis, computer science is the engine that powers the technology, productivity, and innovation that drive the world. Computer science experience has become an imperative for today's students and the workforce of tomorrow. The AP Program designed AP Computer Science Principles with the goal of creating leaders in computer science fields and attracting and engaging those who are traditionally underrepresented with essential computing tools and multidisciplinary opportunities. AP Computer Science Principles was created with significant support from the National Science Foundation. The rigorous process of development and testing has yielded a course that not only reflects the latest scholarship in the field, but provides students with a relevant and engaging learning experience.

**CERTIFIED NURSE ASSISTANT PROGRAM****BASIC NURSE ASSISTANT PROGRAM**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Lincoln Land Community College Reading Comprehension Exam, be in good academic standing, have good attendance.  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 2 Hours/Elective  
 LLCC Dual Credit (6.5 credit hours)  
 COURSE DESCRIPTION:

This CNA program is provided by Hillsboro High School in affiliation with Lincoln Land Community College and approved by the Department of Public Health. This course is specifically designed to train students to be Certified Nurse Assistants. Upon successful completion of the course, the student receives a certificate making him/her eligible to be employed in home health agencies, nursing homes, and hospitals. In order to complete the program, students must pass a competency exam required by state and federal guidelines. The student will be given 6.5 credit hours of Lincoln Land credit for successful completion of this course.

LLCC Course Information: NAS 101 Basic Nurse Assistant (6.5 credit hours)

## ENGLISH DEPARTMENT

### ENGLISH I

OPEN TO GRADES:	9
PREREQUISITES:	English courses should be taken in sequence.
LENGTH OF COURSE:	1 Year
CREDIT:	1 Credit/Required
COURSE DESCRIPTION:	

Freshman English encompasses reading, writing, listening, speaking, vocabulary, and grammar with various assignments, activities, essays, and assessments to reinforce these components. The curriculum involves short stories, novels, poetry, drama, and mythology, with emphasis on vocabulary development, literary analysis, and reading strategies to improve literacy. A few of the classics include Edgar Allan Poe's *The Cask of Amontillado* and *The Raven*, William Shakespeare's *Romeo & Juliet*, Homer's *Odyssey*, Sir Arthur Conan Doyle's *The Red Headed League*, Daphne du Maurier's *The Birds*, and Harper Lee's *To Kill A Mockingbird*.

### ADVANCED ENGLISH I

OPEN TO GRADES:	9
PREREQUISITES:	Recommended by 8th grade Language Arts teachers, high standardized test scores
LENGTH OF COURSE:	1 Year
COURSE DESCRIPTION:	

Advanced Freshmen English encompasses all of the above elements plus additional selections and activities added to offer challenges and a more in depth study of the world around us in connection to not only the English language, but also our heritage. For instance, an additional unit includes renowned author Elie Wiesel's *Night*, and a powerful look at one man's journey and survival of the Holocaust. In addition to added materials and activities, Advanced English I students will be held to higher expectations to foster and support the demands of a collegiate future.

### ENGLISH II

OPEN TO GRADES:	10
PREREQUISITES:	English I
LENGTH OF COURSE:	1 Year
CREDIT:	1 Credit/Required
COURSE DESCRIPTION:	

Students will read literature from a variety of sources and write for a variety of purposes and audience. Journal writing and essays are stressed. Literary terms and analysis of different genres of literature are a focus of this class.

**ADVANCED ENGLISH II**

OPEN TO GRADES: 10  
 PREREQUISITES: English I and approval of instructor  
 LENGTH OF COURSE: 1 YEAR  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

Students will develop their reading and writing skills through an intense curriculum in which writing assignments, projects and critical thinking activities are emphasized. Students will also regularly participate in oral presentations, outside reading, and group discussions. Students should be prepared to hone their writing skills through composing numerous essays, and one 1500 word research project. Students will be expected to be self-motivated and be responsible for completing independent reading and writing.

**ENGLISH III**

OPEN TO GRADES: 11  
 PREREQUISITES: English II  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

American Literature is a survey course covering samplings of the major writings from pre-colonial America to contemporary times. Students are expected to read, discuss, and write about assigned poems, essays, stories and novels. Also, students will be expected to demonstrate reading comprehension and critical thinking skills.

**ENGLISH 2250**

OPEN TO GRADES: 11  
 PREREQUISITES: Advance English II or permission of instructor  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective (Weighted Grade Course)  
 SLU 1818 PROGRAM, Dual Credit (3.0 credit hours)  
 COURSE DESCRIPTION:

This course introduces literary study within the context and theme of Cultural Conflict and Social Justice. Through the reading of a wide variety of genres - including drama, poetry, and fiction - the course engages students in literary ways of knowing. Methods include close reading, comparative textual analysis, and argumentative writing. Assessing the relationship between an author's life experiences and writing

SLU 1818 PROGRAM (Dual Credit): ENGL 2250 - Conflict, Social Justice and Literature

**ENGLISH 1500**

OPEN TO GRADES: 12  
 PREREQUISITES: English 2250  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective (Weighted Grade Course)  
 SLU 1818 Program, Dual Credit (3.0 credit hours)

**COURSE DESCRIPTION:**

Develops effective personal and expository prose writing skills, including methods of invention, organization, audience analysis, and style. Focuses on the compositional process.

SLU 1818 Program (Dual Credit): ENGL 1500 - The Process of Composition (3.0 Credit Hours)

**ENGLISH 1900**

OPEN TO GRADES: 12  
 PREREQUISITES: ENGLISH 1500  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective (Weighted Grade Course)  
 SLU 1818 Program, Dual Credit (3.0 credit hours)

**COURSE DESCRIPTION:**

Studies complex structures of language, including its logical and persuasive possibilities. Emphasizes analytical reading, critical thinking, and research methodology skills.

SLU 1818 Program (Dual Credit): ENGL 1900 – Adv. Strategies of Rhetoric and Research (3.0 Credit Hours)

**ENGLISH IV**

OPEN TO GRADES: 12  
 PREREQUISITES: English III  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required

**COURSE DESCRIPTION:**

English IV comprises two elements: composition coursework and a study of British Literature. The writing-intensive composition coursework focuses on development of organization, voice, fluency, conventions of written English, and the research paper process. Literature selections include the following: *Beowulf*, *The Canterbury Tales*, and *Macbeth*.



**READER RESPONSE**

OPEN TO GRADES: 12  
 PREREQUISITES: English III  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will read several contemporary novels in order to increase their reading comprehension and fluency expand vocabulary knowledge and practice critical thinking skills. Students will have the opportunity to respond to the various assigned readings through traditional and non-traditional assessments.

**ORAL COMMUNICATIONS**

OPEN TO GRADES: 12  
 PREREQUISITES: English III  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will perform a variety of activities in order to enhance their verbal and nonverbal communication. The following units will be covered: Listening and nonverbal communication, Children's literature, narrative speaking, interviewing, group discussion, persuasive speaking, demonstrative speaking and debate.

**HILTOP**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Permission of the instructor  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit  
 COURSE DESCRIPTION:

The Hiltop course exposes students to a variety of real-life experiences that will help prepare them for the working world beyond high school. Students are required to establish a partnership with the community as they market our yearbook as an advertising product for local businesses. Students are required to manage money and to work within a strict budget. The production rate for Hillsboro High School's yearbooks is approximately \$24,000.00 per year and continues to grow. Hiltop also requires students to set short term and long term goals, and to make sure these goals are met within the confines of our three deadlines. Teamwork is essential as these students must communicate and compromise with each other on a daily basis. Students also learn about successful photography, journalism, caption writing, use of color, and use of graphics and design. Yearbook has many different skills to offer students, and it is a fun way to incorporate creativity into one's high school experience.

## **FAMILY AND CONSUMER SCIENCES**

### **ORIENTATION TO FAMILY & CONSUMER SCIENCES A**

OPEN TO GRADES: 9, 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester/ Fall  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This course introduces students to the basic areas of Family & Consumer Sciences programs. Learning experiences assist students in understanding themselves, their roles and related careers in each of the basic areas of Family & Consumer Sciences. Foundational skills built in personal growth, management and relationship skills, and fashion and design including a sewing unit.

### **ORIENTATION TO FAMILY & CONSUMER SCIENCES B**

OPEN TO GRADES: 9, 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester/ Spring  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This course introduces students to the basic areas of Family & Consumer Sciences programs. Learning experiences assist students in understanding themselves, their roles and related careers in each of the basic areas of Family & Consumer Sciences. Foundational skills built in health and wellness, food preparation, consumerism, caregiving, and housing and design.

### **CULINARY ARTS & WELLNESS**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This course promotes knowledge and understanding of basic food principles and applied nutrition and wellness strategies for all people of all ages. The curriculum addresses food service and preparation management using the decision making process; meeting basic needs by applying nutrition concepts; meeting health and safety needs in planning, preparing and serving nutritional meals; maximizing resources when planning, preparing and serving food; promoting hospitality and food etiquette practices; and analyzing individual and family nutritional needs. Career information related to the foods industry is included.

**NUTRITIONAL & CULINARY ARTS II**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: CULINARY ARTS & WELLNESS  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

In Culinary Arts II, students will apply the principles of the hospitality industry, including nutrition, culinary and entrepreneurial opportunities. The course curriculum includes the following topics: food selection, purchase and preparation, conservation of food resources, dietary needs and trends, international cuisine, food safety and sanitation, and career exploration in the food service industry. Earn the Illinois Food Handlers Certificate as part of the class— an industry recognized certification.

**CHILD CARE/TEACHING INTERNSHIP**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Completion of Child Development class highly recommended. Application and/or interview required for enrollment.  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 2 Credit/Elective

**COURSE DESCRIPTION:**

This two-hour course is designed to provide students interested in a career in child and day care operations or in education with information and practical experiences needed for the development of job-related competencies. Students will be provided laboratory experiences either in a school-based or extended campus facility. Students will be expected to develop appropriate skills in program development and in assisting with children and/or adults with activities. Classroom study will include child development principles and the skills needed to successfully guide children while keeping them healthy and safe. The program will combine a minimum of 120 classroom hours of instruction with a possible 480 hours of direct, hands-on experience working with children at a day care facility culminating with a chance to earn the Child Development Associate Credentials. Application and/or interview required for enrollment.

## FINE ARTS

### ART SKILLS – A/B

OPEN TO GRADES: 9-12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester/A-Fall, B-Spring  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Art Skills is a basic art course acquainting students with the many facets of art. Beginning with the elements of art, students will learn the basics. From this point, work is created in various media: graphite, colored pencils, paint, charcoal, chalk, pen and ink, and watercolor. The fundamentals of drawing and painting will be introduced including still life and figure drawing/painting. Three-dimensional work will be explored in the mediums of clay, plaster, and/or paper-mache. A sketchbook with weekly assignments is required. There will also be weekly discussions and writing prompts pertaining to art history.

### CERAMICS

OPEN TO GRADES: 10-12  
 PREREQUISITES: Art Skills A / B  
 LENGTH OF CLASS: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Learn design and skills needed to produce pottery and sculpture using a variety of hand-building techniques. General knowledge about ceramic artists, techniques, art careers, and art criticism will be included. The students will create a sketchbook to use for project sketches and class notes. There will also be weekly discussions and writing prompts pertaining to art history of Ceramics.

### ADVANCED CERAMICS

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Art Skills A / B, Ceramics, and Permission of Instructor  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will build on the knowledge and skills they learned in Ceramics. They will elaborate on skills needed to produce pottery and sculpture using a variety of hand-building techniques. General knowledge about ceramic artists, techniques, art careers, and art criticism will be included. The students will create a sketchbook to use for projects sketches and class notes. There will also be weekly discussions and writing prompts pertaining to art history of Ceramics.

**CREATIVE DRAWING**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Art Skills A/B  
 LENGTH OF COURSE: 1 Semester/Fall  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This class will allow students to advance in the development of drawing skills, use creative ideas, and to study specific artists. Projects will include: expressive portrait, stippling, fantasy, drawing on creative surfaces, assemblage, inventive subjects, and 20<sup>th</sup>-21<sup>st</sup> century styles of art. Students will work in a variety of materials such as colored pencil, conte' crayon, oil pastel, chalk pastel, scratchboard, and ink. A sketchbook with weekly assignments is required. There will also be weekly discussions and writing prompts pertaining to art history.

**CREATIVE DESIGN**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Art Skills A/B  
 LENGTH OF COURSE: 1 Semester/Spring  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This course will explore the various careers in design. Projects will include working with drawing, painting, mixed media, assemblage, clay, and sculpture. A sketchbook with weekly assignments is required. There will also be weekly discussions and writing prompts pertaining to art history.

**ADVANCED ART – A/B**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: 2 semesters of Art including a C+ or higher in Art Skills A/B  
 LENGTH OF COURSE: 1 Semester/A-Fall, B-Spring  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

A career oriented class to develop a portfolio for art school and job applications. Students will develop skills in composition with an advanced approach to working with a variety of Medias. This includes: graphite, colored pencils, acrylic paint, charcoal, chalk, oil pastels, pen and ink, and watercolor. Mixed media drawing and printmaking will also be explored. A sketchbook with weekly assignments is required. There will also be weekly discussions and writing prompts pertaining to art history. There will be no repetition of projects between the two classes.

**PHOTOGRAPHY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Art Skills A/B & 1 other semester of Art or permission of instructor  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This general course provides an opportunity to explore various aspects of photography. Skills and knowledge will be developed in the following areas of photography: digital camera techniques, photography history, composition, and photo design and production using Photoshop software. Projects will include photographing various subjects: nature, animals, landscape, portrait, story, architecture, action, and more. Students will experience the use of B & W, color print, and digital film for projects. Students are required to have a 6.0 megapixel digital camera and a 512 MB jump drive for the class. There will be weekly discussions and writing prompts pertaining to art history of photography.

**ADVANCED PHOTOGRAPHY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Photography & permission of instructor  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will build on the knowledge and skills they learned in Photography. This advanced course continues to develop the exploration of the various aspects of photography. Skills and knowledge will be developed in the following areas of photography: digital camera techniques, photography history, composition, photo design and production using Photoshop software. Projects will include photographing various subjects: nature, animals, landscape, portrait, story, architecture, action, and more. Students will experience the use of Black & White, color print, and digital film for projects. Students are required to have a 6.0 megapixel digital camera and a 512 MB jump drive for the class. There will be weekly discussions and writing prompts pertaining to art history of photography.

## **CHAMBER SINGERS**

OPEN TO GRADES:	9, 10, 11, 12 (Selective)
PREQUISITES:	Prior participation in either junior high or high school choir, audition required
LENGTH OF COURSE:	1 Year
CREDIT:	1 Credit/Elective

### **COURSE DESCRIPTION:**

The Hillsboro High School Chamber Singers is a highly select performing choir of twenty-four to thirty-two students (depending on full enrollment in the high school choral program). Students are selected through a competitive audition and are chosen for the ensemble based on their audition score. In this class, students are required to participate in numerous performances as outlined by the director. Through performance, students gain experience and appreciation for proper vocal techniques, concert etiquette, and different genres of vocal music. Choir students will attend functions outside of school that provide opportunities to grow as musicians, such as the Millikin University Vocal Festival, and IHSA Solo and Ensemble Contest. As a requirement, students will audition for the ILMEA District and All-State ensembles (unless there is an unavoidable scheduling conflict with either the audition or festival).

Students will be required to participate in the annual musical production, whether it be in the cast, on the stage crew, student directing, or other needs as outlined by the director.

Class time will consist of vocal warm-ups, sight singing exercises, and rehearsal of music. Chamber Singers students will also study the symbols, terminology and notation of music. Additional classroom assignments will involve journaling and concert critiques. Students will develop an appreciation and understanding of the art.

Students will be required to have and keep a pencil for all rehearsals. There will also be a \$20.00 class fee that will apply to the cleaning of and maintenance of performance dresses and tuxedos.

## **CONCERT CHOIR**

OPEN TO GRADES:	9, 10, 11, 12 (Selective)
PREQUISITES:	Audition required
LENGTH OF COURSE:	1 Year
CREDIT:	1 Credit/Elective

### **COURSE DESCRIPTION:**

The Hillsboro High School Concert Choir is a performance group selected through audition. In this class, students are required to participate in scheduled performances as outlined by the director. The class will be capped at eighty-five students. Through performance, students gain experience and appreciation for proper vocal techniques, concert etiquette, and different genres of vocal music. Choir students will attend functions outside of school that provide opportunities to grow as musicians, such as ILMEA District and All-State choir, the Millikin University Vocal Festival, and IHSA Solo and Ensemble Contest.

Students will be required to participate in the annual musical production, whether it be in the cast, on the stage crew, student directing, or other needs as outlined by the director.

Class time will consist of vocal warm-ups, sight singing exercises, and rehearsal of music. Concert Choir students will also study the symbols, terminology and notation of music. Additional classroom assignments will involve journaling and concert critiques. Students will develop an appreciation and understanding of the art.

## **BAND**

OPEN TO GRADES: 9, 10, 11, 12

PREREQUISITES: Elementary/junior high instrumental music instruction OR consent of instructor.

LENGTH OF COURSE: 1 Year

CREDIT: 1 Credit/Elective

### **COURSE DESCRIPTION:**

The first quarter consists of marching band activities. During this time, techniques in music execution and marching will be covered in both written theory and performance (both football halftime show and parade). The second and third quarters consist of pep band and concert band literature study and performance to develop musical technique and an appreciation for various types of instrumental band music. A Christmas concert and basketball pep band performances will be presented. Fourth quarter consists of concert music, IHSA solo, ensemble and organizational contests, spring concert and graduation performance. Sectionals will be held as scheduled. Attendance at band performances is required. Some weekend and evening performances are necessary.



## FOREIGN LANGUAGE

### SPANISH I

OPEN TO GRADES: 9, 10, 11  
 PREREQUISITES: Teacher recommendation  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

Oral and written skills are both introduced with emphasis on pronunciation and grammar during this course. Spanish I students learn every day, meaningful expressions, useful vocabulary, and enough grammar to be able to understand and participate in short conversation.

### SPANISH II

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Spanish I and teacher recommendation  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

Spanish II students continue to use and develop oral and written skills. More verb tenses are presented throughout the year with increased vocabulary study. Oral work is stressed with students presenting conversations for the class.

### SPANISH III

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Spanish II and teacher recommendation  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

Oral and written skills are further developed with continued emphasis on grammar skills and increased vocabulary. The student will read and translate dialogs, poetry and short stories in Spanish. Oral conversation is an important element of the course. The class is conducted in Spanish with students expected to participate in the language.

**SPANISH IV**

OPEN TO GRADES: 12  
 PREREQUISITES: Spanish III and recommendation of instructor  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective (Weighted course)  
 COURSE DESCRIPTION:

Oral and written skills are further developed with emphasis on grammatical structure. Vocabulary is increased through a variety of translations. The students will read and translate short stories in Spanish. The culture and civilization of Spanish-speaking countries is studied during the translations. The class is conducted in Spanish and students are expected to participate in the language.

**INDUSTRIAL TECHNOLOGY****BUILDING TRADES**

OPEN TO GRADES: 11, 12  
 LENGTH OF COURSE: 1 Year. May be taken 2 years  
 CREDIT: 3 Credits/Elective  
 LLCC Dual Credit (8.0 credit hours)

**COURSE DESCRIPTION:**

Building Trades is a 2 year program covering basic and some advanced building construction. There is classroom instruction and lab instruction.

Upon completion of the course, the student should be proficient in many of the building construction trades and qualified for an entry level job in the trades. All students are required to wear safety glasses.

LLCC Course Information: BDM 102 Introduction to Construction Occupation (4.0 credit hours)  
 BDM 106 Basic Carpentry I (4.0 credit hours)

## MATHEMATICS DEPARTMENT

### ALGEBRA I

OPEN TO GRADES: 9, 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

This is a traditional Algebra I course that covers basic operations with algebraic equations and polynomials, factoring polynomials, simplifying algebraic fractions, solving ratios, proportions, graphing inequalities and solving linear systems.

### GEOMETRY

OPEN TO GRADES: 9,10,11  
 PREREQUISITES: Algebra I  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

Geometry is the second year course in math for high school students. This course develops a structured mathematical system employing both deductive and inductive reasoning. It includes plane, spatial, coordinate, and transformational geometry. Algebraic methods are used to solve problems involving geometric principles. Geometry is meant to lead students to an understanding that reasoning and proof are fundamental aspects of mathematics and something that sets it apart from the other sciences.

### ALEGBRA II

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Algebra I, Geometry  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

This course is designed to prepare students for careers which need a more thorough understanding of mathematics and to serve as a prerequisite for more advanced math and science classes. This course will include these topics: basic concepts of Algebra, inequalities, linear equations and functions, products and factors of polynomials, rational expressions, irrational and complex numbers, quadratic equations and functions, variation and polynomial equations, analytic geometry, exponential and logarithmic functions, sequences and series, triangular trigonometry, statistics and probability, matrices and determinants.

**STATISTICS**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Algebra II  
 LENGTH OF COURSE: 1 Semester/Fall  
 CREDIT: 0.5 Credit  
 COURSE DESCRIPTION:

This semester long course will focus on the nature of probability and statistics, frequency distributions, graphs, data description, counting rules, and the normal distribution of data. These topics have applications to business, education, medicine, law, sports, and travel.

**TRIGONOMETRY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Algebra II  
 LENGTH OF COURSE: 1 Semester/Spring  
 CREDIT: 0.5 Credit  
 COURSE DESCRIPTION:

This semester long course will focus on the unit circle, right triangle trigonometry, trigonometric functions, graphs, identities, vectors, complex numbers, exponential functions, logarithmic functions, and topics in analytic geometry. These topics have applications in physics, economics, machining, wave motion, indirect measurement, and navigation.

**PRE-CALCULUS**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Algebra II  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

Pre-Calculus is designed to prepare juniors for Calculus and to serve as an exit level advanced math course for those students who need a solid math basis for college courses in engineering, science, pre-med, nursing and business. Topics covered include: Coordinate geometry, advanced graphing, polynomials, inequalities and functions; review and extension of trigonometry; exponents and logarithms; conic sections; polar coordinates and complex numbers; vectors and determinants; finite and infinite sequences and series; probability and statistics.

**CALCULUS**

OPEN TO GRADES: 12  
PREREQUISITES: Pre-Calculus  
LENGTH OF COURSE: 1 Year  
CREDIT: 1 Credit (Weighted class)  
COURSE DESCRIPTION:

Calculus is a capstone course that rests upon classes that began in elementary school through high school pre-calculus. This course provides the mathematical background for those students pursuing careers in science, engineering, business and medicine. Topics include:

Functions, limits and continuity; derivatives, relative maxima and minima, Definite and indefinite integrals, Improper integrals; areas, volumes surface areas; miscellaneous applications of derivatives and integrals in science, business and engineering.

## SCIENCE DEPARTMENT

### BIOLOGY

OPEN TO GRADES: 9  
 PREREQUISITES: none  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

This is an introductory life sciences class. This course will cover basic biological concepts and information. Some lab activities are offered and students are required to wear safety glasses.

### HONORS BIOLOGY

OPEN TO GRADES: 9  
 PREREQUISITES: 8<sup>th</sup> grade teacher recommendation  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

This class will cover not only basic biological concepts and information but will include many laboratory situations and scientific reasoning on various topics. This course is designed for those students who are college bound or want to pursue more advanced science classes in their junior or senior year.

### PHYSICAL SCIENCE

OPEN TO GRADES: 10  
 PREREQUISITES: Biology  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Required  
 COURSE DESCRIPTION:

A basic physical science course dealing with the applied concepts found in both elementary chemistry and elementary physics. Students must understand the basic concepts involving algebraic equations. Emphasis will be placed on the traditional application as well as simple experimental student conclusions. Students will be exposed to both lecture and lab components during this course. All students are expected to wear safety glasses.

**SCIENCE TODAY A/B**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Biology  
 LENGTH OF COURSE: 1 Semester/ A-Fall, B-Spring  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

This class studies current science topics. Considerable time is spent reading contemporary science articles from science magazines and newspapers. Students are expected to write responses/summaries concerning the articles they read. Students also use the internet to research science related topics. The internet research will be used for in-class writings.

**CHEMISTRY**

OPEN TO GRADES: 10, 11, 12  
 PREREQUISITES: Algebra I and have had or be enrolled in Algebra II.  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

This class helps students develop a better understanding of their physical world and prepares them for future training in the pursuit of technical and health careers. Topics covered include the following: atomic theory-classical and quantum, periodic table, bonding, gas laws, energy, reaction rate and equilibrium, acids and bases, electrochemistry, nuclear chemistry and introductory organic chemistry. This class includes lecture, demonstration, laboratory and problem solving activities.

**ANATOMY & PHYSIOLOGY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: For 1st semester student needs a "B" average in Biology. For 2nd semester student needs a "C" average in 1st semester Anatomy.  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit /Elective

**COURSE DESCRIPTION:**

This class allows students to develop a better understanding of the body and how it works. The class also helps prepare students for future training in technical and health careers. Lectures, discussions and laboratory exercises in this class concentrate on the major anatomical structures, basic physiological functions and integrations of the following systems: integumentary (skin), skeletal, muscle, nervous, endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive. Preserved adult cats are used in the laboratory to illustrate comparisons with human morphology. Other specimens include sheep brains, sheep eyes, pig hearts and pig kidneys. Anatomical models are also used to further demonstrate body structures.

**EARTH AND SPACE A/B**

OPEN TO GRADES: 11,12  
 PREREQUISITES: none  
 LENGTH OF COURSE: 1 semester/ A-Fall, B-Spring  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

This course investigates the internal and external functions of the Earth as well as our placement within our own solar system. The class also focuses on the aspects of our solar system, activities of stars, the relationships between planets and their stars, as well as the modern theory that helps explain it all, the Big Bang! This class is broken into 2 semester units and may be taken as a semester course. The first semester will focus on Earth's internal processes and evolution over time. The second semester will focus on Earth's external processes, our solar system, and other aspects of space.

**FORENSIC SCIENCE**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: C average in Biology  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

This course is intended as a hands-on introduction to forensic science. Students will be introduced to methods of collecting evidence at crime scenes, as well as, laboratory processing of the evidence. Students will be required to properly collect, photograph and handle evidence at a crime scene. A background in both biological and physical sciences is necessary to facilitate the learning in this course due to the variety of evidence that can be collected in an investigation.

**FORENSIC SCIENCE II**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: C average in Biology  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

This course is intended as a hands-on introduction to forensic science. Students will be introduced to methods of collecting evidence at crime scenes, as well as, laboratory processing of the evidence. Students will be required to properly collect, photograph and handle evidence at a crime scene. Topics covered within this course are blood and blood spatter, toxicology, mechanism of death and autopsy, anthropology, casts and impressions, tool marks, ballistics. Student background in both biological and physical sciences is necessary to facilitate the learning in this course due to the variety of evidence that can be collected in an investigation.

Students do not need to complete Forensics 1 to enroll in forensics 2.



**MICROBIOLOGY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: "C" average in 1st semester Anatomy  
 LENGTH OF COURSE: 1 Semester/Spring  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

This course is an introduction to microorganisms: bacteria, fungi, protozoa, algae and viruses. Emphasis is placed on the role of microbes in health and disease. Topics covered include cell structure, culture techniques, genetics, immunology and genetic engineering. This class is recommended for students that want to pursue biology or health careers.

**GENETICS**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: "C" average in Biology  
 LENGTH OF COURSE: 1 Semester/Fall  
 CREDIT: 0.5 Credit/Elective

**COURSE DESCRIPTION:**

This course studies the structure of genetic material, DNA replication, the cells cycle and mitosis, transcription, translation, meiosis, Medelian genetics, extensions of Medelian genetics and evolution. Students investigate inheritance patterns through experimentation with a laboratory specimen (the fruit fly).

**ADVANCED PLACEMENT (AP) CHEMISTRY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: Chemistry I with a "B" or better average. Permission of instructor.  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective (Weighted Class)

**COURSE DESCRIPTION:**

Advanced Chemistry involves a review of extension of concepts introduced in Chemistry. More in-depth study of important concepts are supported by extensive lab activities. Since the goal of the class is to prepare the students for the AP Chemistry exam in May, the pace, content, and rigor of the class is similar to that of college level general chemistry. All students in laboratory are required to wear safety glasses.

**PHYSICS**

OPEN TO GRADES: 12  
PREREQUISITES: Pre-Calculus or concurrent enrollment in Pre-Calculus  
LENGTH OF COURSE: 1 Year  
CREDIT: 1 Credit/Elective  
COURSE DESCRIPTION:

This class will approach physics with an emphasis on concepts supported by adequate mathematics. Numerous lab activities will expand upon the ideas presented in the text and lecture. Technology will be an integral part of all lab sessions. Upon completion of the class, students will be able to appreciate physics that surround them. They should also be prepared to manage the rigor of introductory college physics. All students will be required to wear safety glasses during labs.

## **SOCIAL SCIENCE DEPARTMENT**

### **WESTERN CIVILIZATION UP TO 1600'S**

OPEN TO GRADES: 9, 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will study Ancient Greek and Rome to understand how these societies laid the foundation of Western Civilization. Students will study Europe in the Middle Ages with an emphasis on feudalism and medieval society. The semester will conclude with a study of the European Renaissance and Reformation

### **WESTERN CIVILIZATION FROM 1600'S**

OPEN TO GRADES: 9, 10  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Students will study the absolute monarchies of Western Europe through the 1800s. Students will examine how the Enlightenment and revolution transformed Europe from 1500 - 1900. Students will study how nationalism led to the Great Wars of the 20th century.

### **AMERICAN HISTORY**

OPEN TO GRADES: 11  
 PREREQUISITES: Junior standing  
 LENGTH OF COURSE: 1 Year  
 CREDIT: 1 Credit/Elective  
 COURSE DESCRIPTION:

American history is studied from the Civil War to the present day. American documents and Supreme Court cases are chronologically integrated into the course. Class discussion, current events, and all basic social studies skills, including vocabulary and writing are an integral part of this course.

**SOCIOLOGY**

OPEN TO GRADES: 11, 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

The Sociology course is designed to help students understand and explore their world through a sociology perspective. Students will examine how people and groups interact. The course will also reinforce the acquisition and application of various social studies skills as well as general reading and writing skills.

**AMERICAN GOVERNMENT**

OPEN TO GRADES: 12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Required  
 COURSE DESCRIPTION:

Topics include foundations of U.S. government, Congress and the lawmaking process, the Presidency, the federal courts and the judicial process, and the citizenship rights and responsibilities. The Illinois constitution is studied as a separate unit. A community service requirement is a part of the course grade.

**CURRENT EVENTS**

OPEN TO GRADES: 11,12  
 PREREQUISITES: None  
 LENGTH OF COURSE: 1 Semester  
 CREDIT: 0.5 Credit/Elective  
 COURSE DESCRIPTION:

Analysis of current events and trends addressing political, social and economic systems in the US and abroad.

## **SAFETY, HEALTH AND PHYSICAL EDUCATION**

### **CLASSROOM DRIVER TRAINING**

OPEN TO GRADES:	9, 10
PREREQUISITES:	Placement based on age. Must have passed 8 academic credits in the previous 2 semesters. Assignments are made on the basis of age and grade eligibility.
LENGTH OF COURSE:	9 weeks
CREDIT:	None
COURSE DESCRIPTION:	

Classroom Driver Training is the first course students will complete in driver's training. They will learn the fundamentals of driving, a basic understanding of the mechanics of the automobile and the development of defensive driving attitudes. Classroom Driver Training consists of at least thirty hours of classroom training that is required by Illinois law. In order to meet the time requirements students may **not** miss more than 5 days of class for **any** reason. The students will also receive their instruction permits during CDT. Receiving their instruction permit will involve passing the written state driving test and passing a vision screening. There is a \$150 fee for this class that covers the cost of classroom and practice driver's training. The fee covers the cost of leasing and maintaining a vehicle for driver education. In addition you must pay a \$20 fee to the Illinois Secretary of State and provide the proper identification.

### **PRACTICE DRIVER TRAINING**

OPEN TO GRADES:	10, 11, 12
PREREQUISITES:	Successful completion of CDT. Must have passed 8 academic credits in the previous 2 semesters. Assignments are made on the basis of age and grade eligibility.
LENGTH OF COURSE:	9 weeks
CREDIT:	None
COURSE DESCRIPTION:	

PDT consists of at least six hours of driving practice and twelve hours of observation time. Students are not given a set number of days that they meet Illinois state law. Students will be graded on the final road test administered at the end of the nine weeks. The road test is the final and is pass/fail. We are involved with the Cooperative Driver Testing Program which is a state program. It rewards students who have earned an A or B in both CDT and PDT with not having to duplicate the road test at the driver services facility. Before obtaining their license a student must have passed the driver training courses, be 16 years of age, have driven 50 hours with an eligible driver and had their instructional permit for nine months.

**HEALTH**

OPEN TO GRADES	9
PREREQUISITES:	None
LENGTH OF COURSE:	1 Semester
CREDIT:	0.5 Credit/Required
COURSE DESCRIPTION:	

Health is a comprehensive, modern approach to health education. It will help the student to understand health concepts through direct and simple explanations. This approach helps students apply health knowledge in making intelligent decisions about their health and encourages them to achieve and maintain a high level of physical, mental, and social well-being.

**PHYSICAL EDUCATION**

OPEN TO GRADES:	9, 10, 11, 12
PREREQUISITES:	None
LENGTH OF COURSE	9TH Grade – 1 Semester, 10TH, 11TH, 12TH Grades – 1 Year
CREDIT:	9TH – 0.5 Credit/Required 10TH, 11TH, 12TH Grades – 1 Credit/Required

**COURSE DESCRIPTION:**

This course has several goals: To familiarize students with a variety of sports activities; to develop basic skills needed to participate in these sports activities; to encourage positive attitudes and a sense of responsibility towards peers and self; to allow further skill development and concentrated activity in sports areas used for lifetime recreation; and to emphasize fitness for a positive health condition. Written exams will follow each activity.

**1ST HOUR WEIGHT TRAINING A/B**

OPEN TO GRADES:	10, 11, 12
PREREQUISITES:	None
LENGTH OF COURSE:	1 Semester
CREDIT:	0.5 Credit/Elective (May substitute for physical education credit)
COURSE DESCRIPTION:	

This 1<sup>ST</sup> hour class is taught for those interested in physical conditioning. It is conducted in the weight room and enrollment is limited.

**“0” HOUR PHYSICAL EDUCATION A/B**

OPEN TO GRADES:	10, 11, 12
PREREQUISITES:	None
LENGTH OF COURSE	10TH, 11TH, 12TH Grades – 1 Year
CREDIT:	10TH, 11TH, 12TH Grades – 1 Credit/Year is required
COURSE DESCRIPTION:	

This course has several goals: To familiarize students with a variety of sports activities; to develop basic skills needed to participate in these sports activities; to encourage positive attitudes and a sense of responsibility towards peers and self; to allow further skill development and concentrated activity in sports areas used for lifetime recreation; and to emphasize fitness for a positive health condition. Written exams will follow each activity.

**“0” HOUR FUSION FITNESS**

OPEN TO GRADES:	11, 12
PREREQUISITES:	Student must be 16 and will pay a fee to participate unless they hold a Fusion membership.
LENGTH OF COURSE:	1 Semester
CREDIT:	0.5 Credit/Elective (May substitute for physical education credit)
COURSE DESCRIPTION:	

This class meets at Fusion Fitness Center 5 days a week at 7:10am. There is limited enrollment. The goal of the class is for students to appreciate the importance of setting personal fitness goals and maintaining a lifestyle that includes a quality fitness routine. Students are expected to use all areas of Fusion and will be divided into groups to meet in specific fitness areas daily. Students are expected to work out for a minimum of 30 minutes daily. The students will do a fitness assessment periodically. Students are graded on attendance, attitude and level of participation. There is a fitness related final exam.