

12/13/2022

# Mercer County High School

## 2023-2024 GUIDE TO REGISTRATION AND COURSE DESCRIPTIONS

*As you read through the course description booklet, keep in mind not all classes are taught every year and at all grade levels. Refer to the course list included in your registration packet for the list of classes being offered during the 2023-2024 school year.*

### **Notice of Nondiscrimination**

The Mercer County Unit School District will not discriminate and will provide equal educational opportunities for all students, including vocational education students, without regard to race, color, national origin, ancestry, sex, ethnicity, language barrier, religious beliefs, physical and mental handicap or disability, or economic and social conditions, or actual or potential marital or parental status.

**2023-2024 MERCER COUNTY HIGH SCHOOL  
GUIDE TO REGISTRATION AND COURSE DESCRIPTIONS  
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## INTRODUCTION

This guide to Registration has been compiled to assist you in selection of classes for next year. It includes a complete list of requirements for graduation (page 4), College entrance requirements (page 5), Request for early graduation procedure, requirements and signature sheet (page 6-8), NCAA guide for college-bound athlete (page 9-10), classes offered at Mercer County High School, plus a description of each course you might take, including prerequisites and fees (pages 12-57).

Each student will be provided a registration packet listing required classes and electives appropriate to their grade level. All students are encouraged to review the Course Description Guide and make sure that all prerequisite requirements are met before selecting classes. If students need additional help due to uncertainties in their education or vocational decision-making plan, students should seek help from the counselor's office.

Computer scheduling will be used to provide fewer class conflicts and a greater chance for you to enroll in the courses you really wish to take. Students will be given an opportunity to meet in the counselor's office to adjust their schedule. **After this point, schedule changes will be held to a minimum. Only extreme circumstances will warrant a schedule change after June 1, 2023.**

Students are advised that, whether scheduling is done manually or by computer, certain course selections will cause personal difficulty in scheduling. The master schedule is designed according to the selections of the majority. Thus, if the student selects a class which is 1) a single section, 2) out of track (college-bound student selects one non-college course), or 3) out of grade level (senior selects a basically sophomore level course), they may have more difficulty getting into that particular class.

A section which should be of special interest to all students is entitled "How to Prepare for College" (page 5). Even for those not planning to attend college, it can be used as a system for planning your future.

Students are required to register for 7 credits. Academically strong students may take 8 credits.

## Graduation Requirements for Mercer County High School (Starting with the Class of 2022)

<b>English (4 credits)</b> English I, English II, English III, & 1 credit of a combination of English IV, Eng. IV Comp. I & II, Technical English I & II or any of the English electives)	4 credits total
<b>Social Science (2 credits)</b> American History or DC US History (1 credit) Civics (1/2 credit) Social Science Elective (1/2 credit)	2 credits total
<b>Mathematics (3 credits)</b> Geometry content [(Informal Geometry) / (Geometry)] (1 credit) Additional Math (2 credits)	3 credits total
<b>Science (3 credits)</b> Biology (1 cr.) Additional Science (2 credits)	3 years total
<b>Physical Education ( 4 credits)</b> (1/2 credit <b>may be</b> waived during the semester in which Health is taken)	4 credits total
<b>Health (1/2 credit)</b>	1/2 credit total
<b>Information Processing 1A or 1B (1/2 credit)</b>	1/2 credit total
<b>Consumer Education (1/2 credit)</b> (May be met by taking Cons. Ed, Ag. Business Management I & II or Co-Op Education Class I & II)	1/2 credit total
<b>Required credits</b>	17.5
<b>Additional Electives</b>	9.5
<b>Total credits to graduate from Mercer County High School</b>	<b>27 credits</b>

Students shall pass an examination on the Declaration of Independence, the Flag of the United States, the Constitution of the United States, and the Constitution of the State of Illinois. In order to proceed normally toward graduation a student must enroll in at least 7 credits per year. No credit will be awarded for completion of less than a semester's work.

## COLLEGE ENTRANCE REQUIREMENTS

**After meeting the State of Illinois graduation requirements, students have 9.5 additional elective slots over a four year period of time to meet their specific college entrance requirements.**

### **College Preparatory Plan**

- 4 cr. English (emphasizing written and oral communications and literature)
  - 3 cr. Social Science (emphasizing history and government)  
(Units required vary depending on the college. Check with colleges for specific requirements)
  - 4 cr. Mathematics (starting with Algebra or Geometry)
  - 3 cr. Science (minimum of two laboratory sciences required)
  - 2 cr. Foreign Language (check with colleges for exact foreign language requirements)
- Additional electives in chosen career field (Students should consult with the counselor's office to determine which courses are most appropriate.)

### **PCCS Partners for College and Career Success**

- 4 cr. English
  - .5 cr. Emphasizing oral communication (Speech)
  - 3 or 4 cr Math – must include Algebra and Geometry
  - 2 cr. Science – 2 years of laboratory science
  - 1 cr. Keyboarding/Comp. Formatting – 1 semester / Computer Applications – 1 semester
  - 1 cr. Technical/Vocational Careers – Orientation level
  - 2 cr. Technical/Vocational Careers – Technical/Training level
  - 2 cr. Social Science – US History, Civics, and .5 other Social Science credit
  - 4 cr. PE and Health – 3 ½ year PE, ½ year Health
- Additional electives as possible to strengthen preparation

## HOW TO PREPARE FOR COLLEGE

If you plan to go to college, consider the following:

1. Determine as early as possible whether or not you plan to attend college. Discuss these plans with your parents; seek the advice of the high school counselor and college representative. Check out [www.isac.org](http://www.isac.org)
2. Select your college early so that you can research the college. Find out exactly what subjects are required for entrance to both the college or university and the field in which you plan to major. Then, plan your high school courses so that you will have taken the subjects needed to enter college.
3. Colleges and universities are most interested in students who rank in the upper half of their graduating class; some schools require that students rank in the upper quarter or higher.
4. If possible, plan to visit the college of your choice during vacation periods prior to your senior year. In reality, a college campus may not be what the mind's eye sees through the catalog or website. (Most colleges provide college visits on Saturday morning for the convenience of students and parents.)
5. Attend college nights when appropriate. MCHS hosts one during Parent/Teacher Conferences in October each year. (Black Hawk College Night is held every fall in Mid-October with over 60 college reps attending)
6. Talk to college representatives when they visit the high school.
7. Remember, the best source of specific college/university entrance requirements is the college catalog or website.
8. Check with the college of your choice for the foreign language requirements.\*

# Mercer County Community Unit School District #404

## Request for Early Graduation

Student Name: \_\_\_\_\_ Date of Request: \_\_\_\_\_

Probable Graduation Date: \_\_\_\_\_

\*Student – please type your reason for application of early graduation on a separate sheet to turn in with application

**Procedure:** A student may apply in writing for early graduation upon completion of seven semesters of school attendance if all graduation requirements are met. A letter explaining why early graduation is desired and a completed “Request for Early Graduation” form must be submitted prior to the beginning of the 7<sup>th</sup> semester. The letter and form are submitted to the school counselor.

The school counselor notifies the Principal of a student request. The counselor verifies the student’s acceptability for early graduation. The Principal approves or denies the request and forwards it to the Superintendent. Based upon the recommendation of the Superintendent, the School Board grants permission for early graduation.

Upon successful completion of the seventh semester classes, a final transcript is issued that shows the student’s completion of all graduation requirements as established by the Board of Education. This ends the student’s enrollment at Mercer County High School. Students graduating early will forfeit the opportunity for all academic distinctions (ex: valedictorian, Top 10, etc). The student is also not eligible for school activities such as IHSA sponsored activities, cheerleading, dance, etc. The student may not attend Prom unless invited by an eligible, currently enrolled student. In this case, the student would be considered as a guest.

A student who graduates early may participate in the graduation ceremony at the end of the school year in which he/she graduated early if conditions are met. The student must attend the graduation rehearsal. Per discretion of Mercer County School District, the student must maintain and display appropriate behavior in the community during the semester while not in attendance. Mercer County High School assumes no responsibility for the ordering of a cap, gown, and/or announcements for graduation. The student may participate only with items ordered at the school from the approved vendor/supplier.

A student who graduates early may write for Mercer County High School scholarships with the understanding that attendance at the Awards Night in May is highly recommended if awarded scholarships.

**Graduation Requirements:** To be eligible for early graduation from Mercer County High School, a student must have completed the following total credits:

**English** – 4 credits (*Eng I, Eng II, Eng III, and an additional credit of a combination of Eng IV, English Comp., Technical English, Creative Writing, Myths and Legends, Novels, Film Studies and/or Fairytales and Folklore*)

**Math** – 3 credits (*one year of Geometry content and two additional years*)

**Science** – 3 credits (*one year has to be Biology*)

**Social Studies** – 2 credits (*Civics, American History and an elective*)

**Consumer Ed** - .5 credit

**Health** - .5 credit

**Physical Education** – 4 credits (*may waive for athletic participation, course load, and/or Health*)

**Information Processing** - .5 credit

**General Electives** – 9.5 credits

**Total Credits Required** = 27

**Parent/Guardian Permission:** “I understand and will comply with the Board of Education policy on early graduation. I understand that upon early graduation, my student loses IHSA athletic eligibility and loses participation privileges in extracurricular activities one of which is Prom. I understand that my student is entitled to participate in graduation exercises, if all practices are attended, behavior during the Spring semester warrants, and if my student orders, purchases, and wears the approved cap and gown as provided by the school approved vendor.”

Parent/Guardian Signature \_\_\_\_\_ Date: \_\_\_\_\_

**Student Statement of Compliance:** “I attest that I have read the above information and will comply with all regulations and expectations as presented. I now indicate my desire to graduate early.

I (circle one) WILL WILL NOT participate in the graduation exercise.”

Student Signature \_\_\_\_\_ Date: \_\_\_\_\_

**School Counselor Certification:** “I certify that \_\_\_\_\_ will meet the graduation requirements as prescribed by the Mercer County CUSD #404 Board of Education and the State of Illinois if he/she successfully completes all of the classes scheduled for the next semester.”

Mercer County High School Counselor Signature \_\_\_\_\_ Date: \_\_\_\_\_

**Principal Approval:** \_\_\_\_\_ Approved \_\_\_\_\_ Not Approved

Principal Signature \_\_\_\_\_ Date \_\_\_\_\_

**Superintendent Approval:** \_\_\_\_\_ Approved \_\_\_\_\_ Not Approved

Superintendent Signature \_\_\_\_\_ Date \_\_\_\_\_

**Board Approval:** \_\_\_\_\_ Approved \_\_\_\_\_ Not Approved

Board Signature \_\_\_\_\_ Date \_\_\_\_\_

# NCAA FRESHMAN-ELIGIBILITY STANDARDS

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

## QUICK REFERENCE

### KNOW THE RULES:

#### Core Courses

**NCAA Division I requires 16 core courses** This rule applies to any student first entering any Division I college or university. See the chart below for the breakdown of this 16 core-course requirement.

**NCAA Division II requires 16 core courses.** See the breakdown of core-course requirements below.

#### Test Scores

**Division I** has a sliding scale for test score and grade-point average. The sliding scale for those requirements is shown on page two of this sheet.

**Division II** has a minimum SAT score requirement of 820 or an ACT sum score of 68.

The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.

The ACT score used for NCAA purposes is a **sum** of the four sections on the ACT: English, mathematics, reading and science.

**All SAT and ACT scores must be reported directly to the NCAA Eligibility Center by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Eligibility Center code of 9999 to make sure the score is reported to the Eligibility Center.**

#### Grade-Point Average

Only core courses are used in the calculation of the grade-point average.

**Be sure** to look at your high school's list of NCAA-approved core courses on the Eligibility Center's Web site to make certain that courses being taken have been approved as core courses. The Web site is [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

**Division I** grade-point-average requirements are listed on page two of this sheet.

**The Division II** grade-point-average requirement is a minimum of 2.000.

#### DIVISION I

##### 16 Core-Course Rule

###### 16 Core Courses:

- 4 years of English.
- 3 years of mathematics (Algebra I or higher).
- 2 years of natural/physical science (1 year of lab if offered by high school).
- 1 year of additional English, mathematics or natural/physical science.
- 2 years of social science.
- 4 years of additional courses (from any area above, foreign language or nondoctrinal religion/philosophy).

#### DIVISION II

##### 16 Core-Course Rule

###### 16 Core Courses:

- 3 years of English.
- 2 years of mathematics (Algebra I or higher).
- 2 years of natural/physical science (1 year of lab if offered by high school).
- 3 years of additional English, mathematics or natural/physical science.
- 2 years of social science.
- 4 years of additional courses (from any area above, foreign language or nondoctrinal religion/philosophy).

# NCAA FRESHMAN-ELIGIBILITY STANDARDS

## OTHER IMPORTANT INFORMATION

- Division II has no sliding scale. The minimum core grade-point average is 2.000. The minimum SAT score is 820 (verbal and math sections only) and the minimum ACT sum score is 68.
- 16 core courses are currently required for Division II.
- 16 core courses are required for Division I.
- The SAT combined score is based on the verbal and math sections only. The writing section will not be used.
- SAT and ACT scores must be reported directly to the Eligibility Center from the testing agency. Scores on transcripts will not be used.
- Students enrolling at an NCAA Division I or II institution for the first time need to also complete the amateurism questionnaire through the Eligibility Center Web site. Students need to request final amateurism certification prior to enrollment.

**For more information regarding the rules, please go to [www.NCAA.org](http://www.NCAA.org). Click on “Academics and Athletes” then “Eligibility and Recruiting.” Or visit the Eligibility Center Web site at [www.eligibilitycenter.org](http://www.eligibilitycenter.org). Please call the NCAA Eligibility Center if you have questions:  
Toll-free number: 877/262-1492.**

NCAA Eligibility Center

## **Division I Core GPA and Test Score Sliding Scale**

3.550 & above 400 37	2.775 710 58
3.525 410 38	2.750 720 59
3.500 420 39	2.725 730 59
3.475 430 40	2.700 730 60
3.450 440 41	2.675 740-750 61
3.425 450 41	2.650 760 62
3.400 460 42	2.625 770 63
3.375 470 42	2.600 780 64
3.350 480 43	2.575 790 65
3.325 490 44	2.550 800 66
3.300 500 44	2.525 810 67
3.275 510 45	2.500 820 68
3.250 520 46	2.475 830 69
3.225 530 46	2.450 840-850 70
3.200 540 47	2.425 860 70
3.175 550 47	2.400 860 71
3.150 560 48	2.375 870 72
3.125 570 49	2.350 880 73
3.100 580 49	2.325 890 74
3.075 590 50	2.300 900 75
3.050 600 50	2.275 910 76
3.025 610 51	2.250 920 77
3.000 620 52	2.225 930 78
2.975 630 52	2.200 940 79
2.950 640 53	2.175 950 80
2.925 650 53	2.150 960 80
2.900 660 54	2.125 960 81
2.875 670 55	2.100 970 82
2.850 680 56	2.075 980 83
2.825 690 56	2.050 990 84
2.800 700 57	2.025 1000 85
	2.000 1010 86

## Dual Credit/Distant Learning at Mercer County High School

***Black Hawk College English Composition I and II, DC US History 105 & 106, Greenhouse Production Hort. Dual Credit I & II, Agricultural Metal Fabrication Dual Credit Welding I & II, Animal Nutrition Dual Credit, Intro to Veterinary Technology Dual Credit, Psychology 101, and Sociology 101 are dual credit classes offered at Mercer County High School. Please check with the school counselor for additional information on these and other course offerings.***

Dual Credit/Distant learning is popular in most states throughout the United States. Distant learning allows upperclassmen to enroll in a concurrent education program while attending high school. During the 2023-2024 school year Mercer County High School students meeting the Accuplacer test requirements will have two ways to participate in distant learning.

1. Seniors may commute to the BHC/MIU-QC campus for classes. This will allow students to participate in classes not offered at MCHS. (Students must register for at least 4 classes per semester at Mercer County High School (Study Hall not included) and be on target for graduation, plus 5-6 additional credits at Black Hawk College)
2. Juniors and Seniors may register for dual-enrollment courses. Students may receive high school and college credit simultaneously if they meet qualifying Accuplacer scores and the class is taught at Mercer County High School. **Students are always responsible for college tuition and book fees.**

### **Students wanting to participate in Dual Credit/Distant Learning:**

1. Must complete a Black Hawk College Application. (Available at [www.bhc.edu](http://www.bhc.edu))
2. Must take the Accuplacer Test at Black Hawk College or Mercer County High School (DC US Hist 105 & 106, Ag. Metal Fabrication Dual Credit Welding, Greenhouse Production Hort. Dual Credit, Animal Nutrition Dual Credit, and Veterinary Tech. & Small Animal Care Dual Credit are exempt from the Accuplacer Test unless you wish to earn an associate's degree) Must meet the Accuplacer score requirements before students are allowed to register for the course.
3. Must complete a permission slip "High School Student to Attend Black Hawk College Form". (Forms available in the MCHS counselor's office.) The following information must be included: course number, credit hours, time class is scheduled, parent's signature, & school official's signature (from high school and Black Hawk College).
4. Must contact the counselor's office to register for Dual Credit or BHC classes.
5. Need to register for at least 4 classes per semester at Mercer County High School (Study Hall not included) and be on target for graduation when taking college courses on a college campus. (Students must take at least 2 classes for a total of 5 to 6 credits at BHC in order to remain half-time status at Mercer County High School.)
6. It is the student's responsibility to pay for tuition, transportation expenses, and all related post-secondary school expenses by the deadlines set by Black Hawk College.
7. Students taking courses at BHC (other than dual credit courses) must visit the Black Hawk College bookstore prior to the first day of class each semester to purchase all necessary supplies. Students taking Dual Credit courses at MCHS will pay for Dual credit books (in addition to MCHS book rental fees) during registration at Mercer County High School in August.

### **Paying for Dual Credit and Other College Classes**

**The Mercer County Community Unit #404 School District is not responsible for expenses associated with any post-secondary expenses including dual credit classes. Students are entirely responsible for all college related expenses for each semester including tuition, books, supplies, fees, transportation and other incidental charges.**

**All payments are made directly to Black Hawk College.**

\*\*\*Dual Credit classes are graded on a weighted scale.

## Advanced Placement Courses At Mercer County High School

Advanced Placement courses are designed to prepare students to take the appropriate AP exam in the spring, with the course outlines being based upon the published outlines provided by the Advanced Placement program. These courses are significantly more challenging than regular classes, in that they require a high degree of independent work, significant outside reading, and greater mastery of the material. AP courses are universally considered to be college-level work. Thus, much more is expected of students than in regular courses. For example, students are expected to have mastered all material covered in prerequisite courses. If such material needs review, it is the student's responsibility to seek out that review on his/her own. AP courses may be less teacher-directed and involve more supervised independent study, with the teacher serving as more of a coach than a dispenser of information.

Students requesting AP credit for college must earn specific scores on the AP exam. The scores on the AP exam may qualify students for advanced standing in college. Various colleges and universities have their own standards as to how credit is given for AP courses. The AP exam is graded on a scale of 1 to 5 (5 being the highest). Scores of 3 may earn college credit; a 4 score will earn credit from many colleges; and a score of 5 will earn credit from most colleges. **Parents and students should check with individual colleges to determine their policy on granting credit for AP course work.**

Please note: All students in AP classes will be required to take the first semester exam in that class, in order to give them necessary practice for the AP exam in the spring. Students in AP classes may be required to attend occasional after-school or Saturday labs. Students are responsible for all fees associated with AP testing. (Cost of the AP test is around \$100.)

Students who register for an AP credit class must take the AP exam. AP credit classes are graded on a weighted scale.

## COURSE DESCRIPTION

### ENGLISH

English is the study of literature, composition, grammar, and public speaking:

- \* Reading is basic to the English program, and each teacher seeks to improve the reading ability of students.
- \* Through frequent writing assignments, students learn to express ideas accurately and effectively.
- \* In the study of grammar, students learn correct conventions of style and usage.
- \* Speaking situations develop self-confidence and enhance effective group discussions.

#### ENGLISH I

(State Course Code: 01001A000)

**1004 - A - First Semester**

**1005 - B - Second Semester**

*Grade Level: 9*

*Credit: 1 (year-long course)*

English I is an introductory course which is focused on connecting the thoughts and ideas gained from junior high studies and enhancing them in preparation for high school studies. Literature for this course will focus on the coming of age. Through literary analysis students will learn to gather evidence from texts and incorporate it in written and oral responses. Students will write in argumentative, informational, narrative, and other modes. The Independent Reading Program, which requires students to select their own books for independent reading, is also part of English I. This course will utilize technology in daily activities as well as assessments.

*Unit of Study:*

1. **Unit 1:** Divided We Fall-Why do we feel the need to belong?
2. **Unit 2:** The Call to Adventure-What will you learn on your journey?

3. **Unit 3:** Declaring Your Genius-How do you define intelligence?
4. **Unit 4:** The Art of Disguise-How do we perform for different audiences?
5. **Unit 5:** The Dance of Romance-When is love worth the fall?
6. **Unit 6:** Human Potential-How can you help others achieve their goals?

**ENGLISH II W (Writing Intensive)**

(State Course Code: 01002A000)

**1014 - A - First Semester**

**1015 - B - Second Semester**

Grade Level: 10

Credit: 1 (year-long course)

Prerequisites: English I or administrative approval

English II is a grammar, composition, and literature course. Composition will include sentence combining and revising, paragraph development, and write in argumentative, narrative, informational, and other modes. Literature for this course will include the study of short stories, plays, poetry, and novels. The Independent Reading Program, which requires students to select their own books for independent reading, is also part of English II. This course will utilize technology in daily activities as well as assessments.

Unit of Study:

1. The Power of Communication: Why do words matter?
2. Moving Forward: How does culture influence your goals?
3. The Persistence of Memories: How does the past affect the future?
4. The Ties That Bind: How does the past impact the future?
5. Chopped, Stirred, Blended: What are the ingredients of culture?
6. Origin Stories: How does who we were guide who we will become?

**ENGLISH III W (Writing Intensive) (Computer Literacy Based)**

(State Course Code: 01003A000)

**1024 - A - First Semester**

**1025 - B - Second Semester**

Grade Level: 11

Credit: 1 (year-long course)

Prerequisites: English II or administrative approval.

English III will study various authors in American Literature. The course will further develop grammar usage and writing mechanics skills. Students will develop writing skills through various formal and informal assignments that further develop expository, descriptive, persuasive, argumentative and literary analysis skills. Students will evaluate their peers' writing as well as their own writing through peer discussions. Students will also write a formal research paper. In addition, the English III curriculum may include a unit on careers and post-secondary options. The Independent Reading Program, which requires students to select their own books for independent reading, is also part of English III. This course will utilize technology in daily activities as well as assessments.

Unit of Study:

1. **Unit 1: Breaking Away**-How does independence define the American spirit?
2. **Unit 2: The Highway**-How do journeys influence perspective?
3. **Unit 3: No Strangers Here**-How does place shape the individual?
4. **Unit 4: Living the Dream**-What does home mean to you?
5. **Unit 5: The Wars We Wage**-What does it mean to win?
6. **Unit 6: With Malice Toward None**- How can we attain justice for all?

**TECHNICAL ENGLISH I**

(State Course Code: 01156A000)

**1030 - A - First Semester**

Grade Level: 11-12

Credit: ½ (semester course)

Prerequisite: English II

Technical English I students are provided with an opportunity to focus on their goals for their future. Students will have opportunities to prepare for their careers and improve their skills to make an impact on their futures. Students will

have opportunities to achieve their educational goals by discussing topics that they find important and about topics that are happening around them in society.

**Focus of Study:**

1. Student reflection and guidance to improve their communication skills.
2. Reflecting on real-world problems from the student's interests and points of view.
3. Career readiness upon completion of high school.

**TECHNICAL ENGLISH II**

(State Course Code: 01156A000)

**1031 - B - Second Semester**

Grade Level: 11-12

Credit: ½ (semester course)

Prerequisite: English II

Technical English II students are presented with a class to help prepare them for entering the real world. This class will teach students skills relating to organization, time-management, adaptability, strategies, as well as polishing their communication skills. This class will provide students opportunities to improve and polish their problem solving skills so they can be effective within their community.

**Focus of Study:**

4. Introduction to problem solving skills.
5. Analyzing problem solving skills in real-world situations selected by student interests.
6. Enhancing skills that would be applied to the community.

**ENGLISH IV**

(State Course Code: 01004A000)

**1061 - A - First Semester**

**1062 - B - Second Semester**

Grade Level: 12

Credit: 1 (year-long course)

Prerequisites: English III or administrative approval.

English IV will provide students with skills necessary for academic reading and writing. The course will focus on academic writing and critical reading skills, grammar fundamentals, and MLA documentation.

Course of Length: Year-long

Unity of Study:

1. **Unit 1: What's Next?** - How can we transform the future?
2. **Unit 2: Uncovering Truth** - How do challenges cause us to reveal our true selves?
3. **Unit 3: Against the Wind** - How do leaders fight for their ideas?
4. **Unit 4: Sculpting Reality** - What is the power of story?
5. **Unit 5: Fractured Selves** - What causes individuals to feel alienated?
6. **Unit 6: Times of Transition** - How are we shaped by change?

**ENGLISH IV –College Prep**

(State Course Code: 01103A000)

**1066 - A - First Semester**

**1067 - B - Second Semester**

**Black Hawk College English Composition 101 & 102 Dual Credit**

Grade Level: 12

Credit: 1 (year-long course) MCHS (Weighted) - 6 credit hours for BHC

Fees: \$75 per semester plus books. Tuition is subject to change as assigned by Black Hawk College

Prerequisites: Writing = Appropriate placement scores in writing; or academic ESL Coordinator consent; or ENG 091 "C" or better; or COMM 105 "C" or better; or ENG 100 "C" or better; or concurrent enrollment in ENG 100 AND Reading = Appropriate placement score in reading; or REA 103 "C" or better; or concurrent enrollment in REA 103.

**Students must agree to take English Composition 101 & 102.**

At the time of registration students may register for \*dual credit or college credit.

(\*High School English IV and College English credit may be earned at the same time by taking one class. Most colleges allow English Composition I & II to transfer in as college credit eliminating the need to take English I in college. It is the student's responsibility to check with the college(s) of his/her choice to insure the class will transfer.) **Students are responsible for their own college fees, textbooks, and transcripts for first and second semester. Students will meet Monday –Friday at Mercer County High School.**

### English 101 Composition I

*Prerequisites:* See above

*Credit* ½ (semester) MCHS (Weighted) - 3 BHC credit hours

*Fees:* \$75 per semester plus books. Tuition is subject to change as assigned by Black Hawk College.

The first of two courses in the college's composition sequence, English 101 introduces students to process-oriented writing and provides students with a variety of inventional, organizational, and editorial strategies to utilize in various writing contexts. Through diverse writing assignments, including at least one research-based essay demonstrating the ability to select, evaluate, document, and interact effectively with sources, students will engage with topics in which they will explore writing as a means of self-discovery and effective communication of ideas, and they will produce texts that inform and persuade the reader of the writer's aims through clear and effective support. English 101 requires students to read and think critically, and it emphasizes using appropriate style and voice as well as the conventions of standard English and academic citation.

*Unit of Study:*

1. Unit #1 Finding Your Identity and Your Voice in Writing
2. Unit #2 Narrative Description
3. Unit #3 Compare and Contrast
4. Unit #4 Research and Cause and Effect
5. Unit #5 Definition
6. Unit #6 Process Analysis

### English 102 Composition II

*Prerequisites:* Grade of C or better in English 101

*Credit* ½ (semester) MCHS (Weighted) - 3 BHC credit hrs.

*Fees:* \$75 per semester plus books. Tuition is subject to change as assigned by Black Hawk College.

The second of two courses in the one-year composition sequence, English 102 continues cultivating students' skills in process-oriented writing. It requires students to read, think, and write critically, emphasizing analytical and persuasive writing. Students will critique a variety of texts effectively, including academic discourse, and they will complete a documented, multi-source project in one or two papers for a combined final draft total of at least 2,500 words.

*Unit of Study:*

1. Unit 1: Active Reading and Responding to Sources
2. Unit 2: The Basics of the Argument and How to Effectively Write Arguments
3. Unit 3: Definition Arguments
4. Unit 4: Evaluation Arguments
5. Unit 5: Arguments About Cause
6. Unit 6: Problem/Solution Arguments
7. Unit 7: Value Argument

### CREATIVE WRITING (elective)

(State Course Code: 01104A000)

#### 1123 - A - First Semester

*Grade Level:* 11, 12

*Credit:* ½ (semester course)

*Prerequisites:* Students must have a grade of at least a C- in their previous English class or teacher approval.

This elective course will take writers through all the writing steps. Students will learn techniques for writing poetry, fiction, nonfiction. Activities will challenge students to analyze word choice, develop a style, build plot, and to illuminate character(s). In addition students will gain information about technical aspects of verse, dialogue, and nonfiction writing.

*Unit of Study:* Course is student directed across the semester.

1. Writing

### MYTHS AND LEGENDS (Legends Focus) (elective)

## **1124 - B - Second Semester**

Grade Level: 11, 12

Credit: ½ (semester course)

*Prerequisites: Students must have a grade of at least a C- in their previous English class or teacher approval.*

This course traces specific monster case studies across a variety of genres, explores the larger-than-life leaders (on the side of good, and sometimes evil, too) who have become models for how we think of heroism, charisma, and what it means to seek and wield power over others. From the chivalric Knights of the Round Table to the feats of Maui, and surveys stories of wizards, witches, and more, exploring the allure of all things marvelous, strange, and magical. It considers how language itself constitutes a kind of magic; examines magic as technology, or vice versa, and delves into the foundation of myths and legends from around the world.

Unit of Study:

1. **Unit 1:** Monsters and Myth
2. **Unit 2:** Heroes and Villains
3. **Unit 3:** Magic, Science, and Modern Myths

## **NOVELS (elective)**

**(State Course Code: 01061A000)**

### **1126 - Novels I - B - Second Semester**

### **1127 - Novels II - A - First semester**

Grade Level: 11, 12

Credit: ½ (semester course)

*Prerequisites: Students must have a grade of at least a C- in their previous English class or teacher approval.*

This elective course is designed to help students develop as a reader, listener, and viewer through independent and collaborative reading. Students will explore a variety of authors, genres, and topics that are popular in 21<sup>st</sup> century Young Adult literature. Students will connect with and respond to texts through critical reading and analysis of plot, character, theme, and style.

*Unit of Study:* Course is student directed across the semester.

1. Novel study

## **FILM STUDIES (elective)**

**(State Course Code:05203A000)**

### **1130 - B - Second Semester**

Grade Level: 10-12

Credit: ½ (semester course)

*Prerequisites: Students must have a grade of at least a C- in their previous English class or teacher approval.*

This elective course will focus on the theoretical, historical and critical approaches to cinema as an art form and a medium. A variety of genres and time periods will be studied and viewed in the auditorium. Students will discuss, evaluate and analyze the nuances of what makes films good, bad or memorable.

## **FAIRYTALES and FOLKLORE (elective)**

**(State Course Code: 01065A000)**

### **1050 - A - First Semester**

Grade Level: 11-12

Credit: ½ (semester course)

*Prerequisites: Students must have a grade of at least a C- in their previous English class or teacher approval.*

This elective course will focus on introducing students to various fairytales and folklore. In fairytales and folklore, students will read popular titles from Brothers Grimm, Hans Christian Andersen, and others along with an emphasis in Irish folklore. Students will analyze the reading and connect the literature to psychological and sociological perspectives, as well as analyzing character interactions, historical settings, and why messages are hidden cryptically in each story. Students will also research an author, analyze their writing, and will use this to inspire their own fairytale and folklore writing. The final project will be an original fairytale each student writes.

*Unit of Study:*

1. Unit 1: Brothers Grimm, Hans Christian Andersen, and other authors
2. Unit 2: Irish Folklore
3. Unit 3: Research Project

# **SCIENCE**

Knowledge of science should be a top priority in the preparation of every student. In addition to being essential for anyone desirous of a place in the highly technological world of the present and future, science also has its practical side in preparing citizens for the everyday experiences they will encounter. High school science courses are designed to provide training and intellectual background for students in all such areas. Courses are available for: (1) students planning to go to college but not yet sure what their areas of concentration will be; (2) students whose formal education will end upon graduation from high school; and (3) students planning to major in the sciences or a related field.

## **FRESHMAN PHYSICS**

**(State Course Code: 03159A000)**

**1496 - A - First Semester**

**1497 - B - Second Semester**

*Grade Level: 9*

*Credit: 1 (year-long course)*

This course is designed to give the students a general view of physics. This freshman level course will review, enhance, and add to physics principles that students have encountered prior to entering high school. Students will have information presented to them in a variety of ways including lectures, demonstrations, and laboratory experiences. Students will continue to develop and sharpen their problem-solving skills through data collection, analyzing data through graphs, and critical thinking.

This course will cover major topics such as Nature of Science, Uniform Motion, Uniform Acceleration, Introduction to Forces, and Energy.

*Unit of Study:*

1. Introduction to Science
2. Momentum
3. Forces
4. Gravity
5. Electricity and Magnetism
6. Work, Power and Energy
7. Acceleration and Speed
8. Waves and Sound

## **APPLIED SCIENCE**

**(State Course Code: 03203A000)**

**1504 - A - First Semester**

**1505 - B - Second Semester**

*Grade level: 10, 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Freshman Physics and Administrative Approval*

This course is designed for students taking three years of science to satisfy the school's graduation requirements. Topics covered include problem solving and data collection, matter and its interactions and basic biology.

The traditional lecture-demonstration is interspersed with hands-on laboratory activities.

*Unit of Study:*

- |                                 |                          |
|---------------------------------|--------------------------|
| 1. Measurement                  | 6. Chemical Compounds    |
| 2. Data Collection and Graphing | 7. Chemical Reactions    |
| 3. Solids, Liquids and Gases    | 8. Cells                 |
| 4. Matter and it's properties   | 9. Classification        |
| 5. Periodic Table               | 10. Bacteria and Viruses |

**BIOLOGY****(State Course Code: 03051A000)****1524 - A - First Semester****1525 - B - Second Semester***Grade Level: 10 - 12**Credit: 1 (year-long course)**Prerequisites: Freshman Physics*

Biology is a second year science course which covers the general themes of biology. These include biochemistry, cell biology, genetics, development and evolution, biodiversity and ecology, as well as the discussion of the bioethical issues that arise within these themes. The material is presented using various techniques including lecture, cooperative learning and hands-on techniques, and the use of audiovisual materials. Labs are used to reinforce concepts, as well as acquaint the students with the techniques of experimentation, data collection, and interpretation. Writing, research and critical thinking skills will be integrated into the course to better prepare the student for college level assignments in the sciences.

*Unit of Study:*

1. The Nature of Life (Chapters 1-2)
2. Ecology (Chapters 3-7)
3. Cells (Chapters 8-11)
4. Genetics (Chapters 12-16)
5. Evolution (Chapters 17-20)
6. Diversity of Life (Chapters 21-27)

**AP BIOLOGY****(State Course Code: 03056A000)****1605 - A - First Semester****1606 - B - Second Semester***Grade Level: 11, 12**Credit: 1 (year-long course)**Prerequisites: Must have completed a minimum of Algebra 2 (Math III), successful completion, with a C or better average, of Biology, Chemistry, meet AP selection criteria, and mandatory summer assignment*

This course is a college level course that follows closely the syllabus recommended by the College Board and prepares students for the Advanced Placement examination in Biology. This course is designed to provide a more in-depth study of the biological sciences for students who have a special interest in Biology or its related fields. It will emphasize comparative Anatomy and Physiology, Ecology, Microbiology, Genetics, Cytology, and Biochemistry. Individual research work and laboratory work will be expected of all students. Students enrolled in Advanced Placement are required to take the College Board Advanced Placement test in May.

*Unit of Study:*

1. Chemistry of Life
2. Cell Structure and Function
3. Cellular Energetics
4. Cell Communication and cell Cycle
5. Heredity
6. Gene Expression and Regulation
7. Natural Selection
8. Ecology

**ANATOMY-PHYSIOLOGY****(State Course Code: 03053A000)****1544 - A - First Semester****1545 - B - Second Semester***(Taught alternate years with Zoology, offered in 2024-2025)**Grade Level: 11, 12**Credit: 1 (year-long course)**Prerequisites: Biology and Chemistry I/Pre AP Chem or taking Chemistry I/Pre AP Chem concurrently*

This course will include a yearlong program of intense human anatomy and physiology studies. The areas covered will include medical terminology, basic chemistry, cell and tissue structure, and the 11 systems of the human body

(integumentary, skeletal, muscular, nervous, endocrine, circulatory, lymphatic, digestive, respiratory, urinary and reproductive). This course is designed for college preparation, especially for biology and health career majors. Laboratory work will be required, including comparative anatomy dissection lab using the cat. (Offered alternate years with 1564/1565 Zoology)

*Unit of Study:*

1. Introduction to Anatomy & Physiology Review of Biology
2. Muscular system
3. Skeletal System
4. Endocrine System
5. Respiratory System
6. Digestive System
7. Nervous System
8. Circulatory System
9. Integumentary System
10. Excretory System
11. Lymphatic System
12. Reproductive System
13. Development

## **ZOOLOGY**

**(State Course Code: 03061A000)**

### **1564 - A - First Semester**

### **1565 - B - Second Semester**

(Taught alternate years with Anatomy-Physiology, offered in (2023-2024))

*Grade Level: 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Biology and Chemistry I/Pre AP Chem or taking Chemistry I/Pre AP Chem concurrently*

This course is a general survey course starting with unicellular organisms and going up through man. In addition to general observations, similarities between phyla will be stressed. The inter-relationships of all life will be studied and identified in a field study. One hour in lab for every four lecture hours. (Offered in alternate years with 1544/1545 Anatomy / Physiology)

*Unit of Study:*

1. Introduction to Animals and Biology Review
2. Protozoa
3. Phylum Porifera: Sponges
4. Phylum Cnidaria & Phylum Ctenophora
5. Phylum Platyhelminthes: Flatworms
6. Phylum Nematoda: Roundworms
7. Phylum Mollusca
8. Phylum Annelida
9. Phylum Arthropoda
10. Phylum Echinodermata
11. Phylum Chordata
12. Fishes: Bony and Cartilage
13. Amphibians
14. Reptiles
15. Birds
16. Mammals

## **CHEMISTRY I**

**(State Course Code: 03101A000)**

### **1584 - A - First Semester**

### **1585 - B - Second Semester**

*Grade Level: 10 - 12*

*Credit: 1 (year-long course)*

*Prerequisites: Biology (or taking Biology concurrently) and Algebra I (Math I) or administrative approval*

Chemistry I is a science course that deals with measurements, matter and its changes. Topics include atomic and electronic structure, the periodic table, the nuclear atom, formula writing and nomenclature, equations, chemical bonding, quantitative analysis, stoichiometry and gas laws. This course utilizes both lecture and laboratory sessions. The laboratory sessions involve investigations that will allow students the opportunity to "discover" important chemical concepts or reinforce concepts learned in lecture.

*Unit of Study:*

1. Measurement
2. Matter and Energy
3. Atomic Structure
4. Nucleus and Radioactivity
5. Nomenclature and Formula Writing
6. Bonding

- Equations
- Chemical Quantities
- Stoichiometry

## **PRE AP CHEMISTRY I**

(State Course Code: 03149A000)

### **1600 - A - First Semester**

### **1601 - B - Second Semester**

*Grade Level: 10 & 11*

*Credit: 1 (year-long course)*

*Prerequisites: Biology (or taking Biology concurrently), Algebra I (Math 1) and Geometry(Math 2) (or taking Geometry concurrently) or administrative approval*

Pre-AP Chemistry is a challenging course that covers a greater depth and breadth of content than Chemistry and successfully serves the purpose to prepare students for AP Chemistry. The course relies heavily on ones ability to solve and manipulate variables, and therefore, it is imperative that students enter this course confident in their algebra skills and mathematical abilities

*Unit of Study:*

- Chemistry Preamble
- Matter and Energy
- Atomic Structure
- Bonding and Nomenclature
- Equations
- Reactions in Solutions
- Chemical Quantities
- Stoichiometry
- Gases

## **CHEMISTRY II AP**

(State Course Code: 03106A000)

### **1607 - A - First Semester**

### **1608 - B - Second Semester**

*Grade Level: 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Biology, Chemistry I/Pre AP Chem, and Algebra 2 (Math III) (may be concurrently enrolled), or administrative approval.*

Chemistry II AP is a continuation of Chemistry I. Topics covered include quantitative aspects of electrons and light energy, periodic trends, intermolecular forces, bonding, organic chemistry, gas laws, thermo chemistry, solution stoichiometry, kinetics, equilibrium and oxidation reduction reactions. Laboratory and lecture sessions work together to develop in students an understanding of the concepts of chemistry and how they relate to the world in which we live.

This class may be taken to meet a high school graduation credit and for Advanced Placement credit in college. The Advanced Placement Test will be given at Mercer County High School in May. Check with specific colleges for required AP test score. Students are responsible for all fees associated with AP testing. (Cost of AP test is approximately \$100.) Students who don't meet the minimum AP score will still receive graduation credit as long as the grade in class is a D or better. This class will require summer course work before class begins.

*Unit of Study:*

- Atomic Structure and Properties
- Molecular and Ionic compounds and properties
- Intermolecular Forces
- Chemical Reactions
- Kinetics
- Thermodynamics
- Equilibrium
- Acids and Bases
- Electrochemistry

## **PHYSICS I**

**(State Course Code: 0315A000)**

**1624 - A - First Semester**

**1625 - B - Second Semester**

*Grade Level: 11, 12*

*Credit: 1 (year-long course)*

*(Taught alternate years with Earth Science, offered in 2023-2024)*

*Prerequisites: Biology, Chemistry I/Pre AP Chem, Algebra I (Math 1), Geometry (Math 2), Algebra 2 (Math 3) (prior to or concurrently), or administrative approval. Scientific calculator (required)*

Whether the student plans on going into business, teaching, medicine, agriculture, engineering, or virtually any other field, he or she will find knowledge of physics very useful. Students become familiar with such fascinating topics as motion, forces, structural design, energy interactions, and more. Real-life applications are constantly stressed, and concepts are developed through lecture-demonstrations, computer-assisted activities, a variety of audio-visual aids, and extensive computer interfaced laboratory experiences. A strong emphasis is placed on problem solving. One of the highlights is the annual "Rube Goldberg Competition". Students completing this course will have a good foundation for further study of physics at the college level.

*Unit of Study:*

1. Introduction to Science
2. Constant Velocity
3. Uniform Acceleration
4. Circular Motion
5. Projectile Motion
6. Impulse
7. Constant Momentum
8. Energy

## **EARTH SCIENCE**

**(State Course Code: 03001A000)**

**1501 - A - First Semester**

**1502 - B - Second Semester**

*Grade Level: 11, 12*

*Credit: 1 (year-long course)*

*(Taught alternate years with Physics, offered in 2024-2025)*

*Prerequisites: Freshman Physics and Biology*

This course is designed to give the students a better understanding of the Earth and Universe. Students will dive into topics such as Earth's place in the Universe and Earth's systems. Students will have information presented to them in a variety of ways including lectures, demonstrations, and laboratory experiences. Students will continue to develop and sharpen their problem-solving skills through data collection, analyzing data through graphs, and critical thinking.

*Unit of Study:*

1. Introduction to Science
2. Rocks and Minerals
3. Plate Tectonics
4. Atmosphere/Weather
5. Astronomy
6. Human Implications

## **MATHEMATICS**

The State of Illinois requires all graduating students to have a minimum of 3 math credits. All students will need one credit of geometry content plus two additional math credits.

The Mathematics Staff has worked together to form a curriculum that will prepare students from the district for life after high school. The National Council of Teachers of Mathematics suggests that all students graduate from high school proficient in Algebra. The authors of ACT/SAT suggest that to be successful on the test, students should be exposed to Algebra II material. We want our students prepared beyond Algebra II. **Students taking more than one math class per year must have instructor & administrative approval.**

## **PRE-ALGEBRA**

**(State Course Code: 02051A000)**

**2006 - A - First Semester**

**2009 - B - Second Semester**

*Grade Level: 9-12*

*Credit: 1 (year-long course)*

*Prerequisites: Placement by math department, Instructor & Administrative Approval*

Pre-Algebra courses increase students' foundational mathematics skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

*Unit of Study:*

- |  |   |
|--|---|
| 1. Proportional Relationships                | 8. Linear Relationships & Slope                 |
| 2. Solve Percent Problems                    | 9. Probability                                  |
| 3. Operations with Integers Rational Numbers | 10. Sampling & Statistics                       |
| 4. Exponents & Scientific Notation           | 11. Geometric Figures                           |
| 5. Real Numbers                              | 12. Area, Surface Area, and Volume              |
| 6. Algebraic Expressions                     | 13. Transformations, Congruence, and Similarity |
| 7. Equations & Inequalities                  |   |

## **ALGEBRA I**

**(State Course Code: 02052A000)**

**2027 - A - First Semester**

**2029 - B - Second Semester**

*Grade Level: 9 - 12*

*Credit: 1 (year-long course)*

Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

*Unit of Study:*

- |                                 |   |
|---------------------------------|---|
| 1. Expressions                  | 7. Systems of Linear & Nonlinear Inequalities |
| 2. Equations in One Variable    | 8. Exponents & Roots                          |
| 3. Relations & Functions        | 9. Exponential Functions                      |
| 4. Linear & Nonlinear Functions | 10. Polynomials                               |
| 5. Creating Linear Equations    | 11. Quadratic Functions                       |
| 6. Linear Inequalities          | 12. Statistics                                |

## **INFORMAL GEOMETRY**

**(State Course Code: 02071A000)**

**2014 - A - First Semester**

**2015 - B - Second Semester**

*Grade Level: 10-12*

*Credits: 1 (year-long course)*

*Prerequisites: Algebra I (Math I), Instructor and administrative approval*

Informal Geometry courses emphasize a practical approach to the study of geometry and deemphasize an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods

of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

*Unit of Study:*

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| 1. Algebra Basics                   | 7. Quadrilaterals                    |
| 2. Basics of Geometry               | 8. Similarity                        |
| 3. Segments and Angles              | 9. Polygons and Area                 |
| 4. Parallel and Perpendicular Lines | 10. Surface Area and Volume          |
| 5. Triangle Relationships           | 11. Right Triangles And Trigonometry |
| 6. Congruent Triangles              | 12. Circles                          |

## **GEOMETRY**

**(State Course Code: 02072A000)**

**2067 - A - First Semester**

**2068 - B - Second Semester**

*Grade Level: 9 - 12*

*Credit: 1 (year-long course)*

*Prerequisites: Algebra I (Math I), Instructor and administrative approval*

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

*Unit of Study:*

- |   |                                     |
|---|-------------------------------------|
| 1. Tools of Geometry                        | 7. Quadrilaterals                   |
| 2. Angles and Geometric Figures             | 8. Similarity                       |
| 3. Logical Arguments and Line Relationships | 9. Right Triangles and Trigonometry |
| 4. Transformations and Symmetry             | 10. Circles                         |
| 5. Triangles and Congruence                 | 11. Measurement                     |
| 6. Relationships in Triangles               | 12. Probability                     |

## **ALGEBRA II**

**(State Course Code: 02056A000)**

**2080 - A - First Semester**

**2081 - B - Second Semester**

*Grade Level: 10, 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Algebra I (Math I) and Geometry (Math 2) or taking Geometry concurrently, appropriate math benchmark, & administrative approval.*

Algebra II will guide you through, among other things, linear equations, inequalities, graphs, polynomials and radical expressions, quadratic equations, functions, sequences and series, intermediate trigonometry concepts as well as other topics as time allows.

*Unit of Study:*

1. Functions
2. Quadratics
3. Systems of equations and inequalities
4. Intermediate trigonometry concepts
5. Rationals
6. Other topics as time permits

## **SENIOR MATH**

**(State Course Code: 02999A000)**

**2087 - A - First Semester**

**2088 - B - Second Semester**

*Grade Level: 12*

*Credit: 1 (year-long course)*

*Prerequisites: Algebra II (previously Math 3)*

Course will be designed to fit Seniors' needs. Content will prepare students for college placement exam. The student who should take this course is a senior who after graduating is entering the work field, military, Junior College or a four year college as a non-math/science major. The curriculum of the course will review algebra and geometry topics, loan calculations, fractions.

*Unit of Study:*

1. Linear Equations & Inequalities
2. Systems of Equations- All 3 Methods & 3-Variable Systems
3. Polynomials
4. Quadratic Equations & Functions (Including Graphing)
5. Exponents-Functions
6. Matrices
7. Surface Area & Volume
8. Trigonometry
9. Linear Algebra (College-Introduction)

### **MATH LITERACY 092/094**

**(State Course Code: 02994A000)**

**2112 - A - First Semester**

**2113 - B - Second Semester**

*Grade Level: 12      Credit:1 (year-long course) (semester of 092 & semester of 094)*

*Prerequisites: Successful completion of 3 years of math*

Developmental mathematics path for students who plan to take general education mathematics and/or general education statistics. This course focuses on developing mathematical maturity through problem solving, critical thinking, data analysis, and the writing and communication of mathematics. This course is taught in conjunction with Black Hawk College as a non-credit course for the College. Successful students will have the opportunity to enroll in a credit bearing math course at Black Hawk College after completion of this course (See the Math Department or Black Hawk College for more information). This course is recommended for students interested in a Non-STEM program of study in the future.

*Unit of Study: Expected Learning Objectives (determined by the college)*

1. Demonstrate understanding of the characteristics of functions and apply this knowledge in modeling and problem solving.
2. Perform operations on expression and functions and make use of those operations in modeling and problem solving.
3. Solve equations in the context of modeling and problem solving.
4. Represent mathematical information symbolically, visually, numerically, and verbally.
5. Estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results
6. Use mathematically correct vocabulary and symbolism to communicate problem statements, problem-solving methods, and interpretations of the solutions to problems

### **PRE-CALCULUS**

**(State Course Code: 02110A000)**

**2124 - A - First Semester**

**2125 - B - Second Semester**

*Grade Level: 11, 12      Credit: 1 (year-long course)*

*Prerequisites (not concurrently): Algebra I (Math 1), Geometry (Math 2), Algebra II (Math 3), appropriate math benchmark, & administrative approval.*

Pre-Calculus is a one year course offered to students to give them a background for calculus. Pre-Calculus will enable students to study in depth the topics of advanced algebraic expressions, properties of functions, conic sections, polar coordinates, and complex numbers, sequences, series extensive graphing, trigonometric functions, trigonometric identities, plus probability and statistics. There is in depth use of graphing calculators. It would be best if students purchase his/her own graphing calculator.

*Unit of Study:*

1. PreRequisite Review
2. Common Functions
3. Quadratic Functions
4. Higher Degree Polynomials
5. Rational Functions
6. Exponential Functions
7. Logarithmic Functions
8. Trigonometry

9. Intro To Vectors
10. Partial Fraction Decomposition
11. Counting and Probability
12. Intro to Limits
13. Slope of Secant (Average Rate of Change)
14. Difference Quotient
15. Derivative

## CALCULUS

(State Course Code: 02121A000)

### 2140 - A - First Semester

### 2141 - B - Second Semester

Grade Level: 12

Credit: 1 (year-long course)

*Prerequisites: Algebra I (Math 1), Geometry (Math 2), Algebra II (Math 3) and Pre Calculus (B or better recommended in Pre-Calculus), appropriate math benchmark, instructor & administrative approval.*

This course makes extensive use of plane Geometry and Algebra. Added to these are the notion of limit and limiting processes. This course is for students that want to take calculus but are not ready for the time demands of the AP course. Topics include: functions, limits, derivatives, integrals, transcendental functions, techniques of integration, volume of revolutions/area and concepts related to physics. Students who take this course are preparing for college study in Business, Economics, Physics, engineering, and Mathematics. Students should have his/her own graphing calculator.

*Unit of Study:*

1. Algebra Preliminaries
2. Solving equations
3. Polynomials
4. Exponentials and Logs
5. Limits
6. Derivatives
7. Applications of Derivatives
8. Integrals
9. Application of Integrals

## CALCULUS AP

(State Course Code: 02111A000)

### 2144 - A - First Semester

### 2145 - B - Second Semester

Grade Level: 12

Credit: 1 (year-long course)

*Prerequisites: Algebra I (Math 1), Geometry (Math 2), Algebra II (Math 3) and Pre Calculus (B or better recommended in Pre-Calculus), appropriate math benchmark, instructor & administrative approval.*

This course makes extensive use of plane Geometry and Algebra. Added to these are the notion of limit and limiting processes. Topics include: functions, limits, derivatives, integrals, transcendental functions, techniques of integration, volume of revolutions/area and concepts related to physics. Students who take this course are preparing for college study in Business, Economics, Physics, Engineering, and Mathematics. This class may be taken to meet a high school graduation credit and for Advanced Placement credit in college. The Advanced Placement Test will be given at Mercer County High School in May. Check with specific colleges for required AP test score. Students are responsible for all fees associated with AP testing. (Cost of AP test is approximately \$100.) Students will receive graduation credit as long as the grade in class is a D or better. This class will require summer course work before class begins. (See additional AP information on page 7.) To receive AP credit for the class a student must take the AP Exam.

*Unit of Study:*

Unit 1

Limits

Continuity

Intermediate Value Theorem

- Unit 2
- Average Rate of Change
  - Instantaneous Rate of Change
  - Differentiability
  - Derivative
  - Rules for Differentiation
    - Sum, Product, Quotient
  - Trig Derivatives
  - Exponential and Logarithmic derivative
- Unit 3
- Chain Rule
  - Implicit Differentiation
  - Inverse Trigonometry
  - Higher Order Derivatives
- Unit 4
- Straight line Motion
  - Velocity
  - Acceleration
  - Related Rates

- L'Hopitals Rule
- Unit 5
- Mean Value Theorem
  - First Derivative Test
  - Second Derivative Test
  - Increasing/Decreasing
  - Concavity
  - Optimization
- Unit 6
- Accumulation
  - Riemann Sums
  - Antiderivative
  - Integrations Techniques
- Unit 7
- Slope fields
  - Differential Equations
- Unit 8
- Average Value
  - Volume and Area

**STATISTICS (elective)**

**(State Course Code: 02201A000)**

**2154 - A - First Semester**

**2155 - B - Second Semester**

*Grade Level: 11-12*

*Credit: 1 (year-long course)*

*Prerequisites (not concurrently): Algebra I (Math 1), Geometry (Math 2), Algebra II (Math 3) and administrative approval*

Students who take this course are preparing for study in business, nursing, social sciences, science, math and engineering. Topics covered: sampling, data collection, averages, expected value, measures of dispersion, and statistical distributions such as normal, t and Chi Squared, and probability of discrete and continuous variables, counting using combinations and permutations.

*Unit of Study:*

1. Introduction:: Basic Vocabulary
2. Descriptive Statistics:
3. Probability
4. Discrete Probability Distributions
5. Normal Probability Distribution
6. Confidence Intervals
7. Hypothesis Testing with One Sample
8. Hypothesis Testing with Two Samples
9. Correlation and Regression

**ROBOTICS (elective)**

**(State Course Code: 21009A000)**

**2182 - First or Second Semester**

*Grade Level: 10, 11, 12*

*Credit: ½ (semester course)*

*Prerequisites: Geometry (Math 2) and one of the following: Pass the Computer proficiency test. (See the counselor for details.)*

Robotics is a multi-faceted class that incorporates technology. Students will learn how to use the digital camera, video/digital camera, RCX programming languages and RobotC language. Students will use these skills learned in Lego® Mindstorms robotic unit. Students will program, build and record the progress of robotics to solve a particular

situation under given constraint. Students will gain the ability to work in teams. This class works towards applying math, physics and engineering.

*Unit of Study:*

Introduction to Solar Cars	Stair Climber
Introduction to Lego Mindstorms	Battlebot
Programming	Introduction to Tetrix
Projects:	Can Crusher
Driving Forward	Shirt folder
Shooting a Basket	Color Sorter
TP Dispenser	Syrup Pour
Loading Dock	Remote Control

## **SOCIAL SCIENCE**

The primary purpose of the Social Science curriculum is to assist each student in the development of intelligent and responsible citizenship and to provide classroom experiences which will help in gaining a knowledge of and allegiance to democratic ideas and values. The faculty members believe that a knowledge of our heritage is necessary for the intelligent, educated person, but also that this knowledge must be matched to the problems of today to be truly worthwhile.

### **GEOGRAPHY**

**(State Course Code: 04001A000)**

#### **2502 - First or Second Semester**

*Grade Level: 9-12*                      *Credit: ½ (semester course)*

A comparative study of the Geography and cultures of the nations and peoples of the Western & Eastern Hemisphere that focuses on the similarities and differences between the U.S. Culture and those of other regional nations.

*Unit of Study:*

1. Intro to Geography
2. Europe
3. Africa
4. Asia
5. South America
6. Australia
7. North America

### **POLITICAL SCIENCE**

**(State Course Code: 04153A000)**

#### **2544 - First or Second Semester**

*Grade Level 10, 11, 12*                      *Credit 1/2 (semester course)*

This course is designed for the independent, creative, and motivated student who wants a more clear understanding of policy-making bodies, their processes, and how to gain access to them. It will utilize a number of teaching and learning styles and will involve the use of the Internet on a constant basis. The primary goal in this is the encouragement of “out-of-the-box” thinking and communicating. Topics covered will include current social, legal, and political issues.

*Unit of Study:*

1. Political Theory
2. American Political Science
3. Comparative Politics
4. International Relations

### **HOLOCAUST**

**(State Course Code: 04065A000)**

**2545 - First or Second Semester**

Grade Level: 11 -12

Credit: ½ (semester course)

Prerequisites: None

Exploration of the Holocaust in historical perspective by examining European anti-Semitism, political developments in Germany, the rise to power of the Nazis, and the origins of the Holocaust with first-hand accounts, films, and historical texts, concluding with the legacy of the Holocaust in the modern world.

Unit of Study:

1. Rise of the Nazi Party
2. Early Persecution and Formation of the Ghettos
3. Movement to the Camps
4. Resistance
5. Aftermath of the Holocaust

**HISTORY AND SPORTS**

(State Course Code: 04109A000)

**2546 - First or Second Semester**

Grade Level: 9 - 12

Credit: 1/2 (semester course)

Prerequisites: None

This history elective will examine the development of sports in America. Our historical study will focus on helping students gain a better understanding of the relationship that sports has with social, economic, cultural, and political forces that are at work in the United States as well as the world. We will examine the historical context as well as the significance of race, gender, ethnicity, and social class. We will do our historical investigation through readings, primary sources, audio, and visual materials as well as class discussions.

Unit of Study:

1. Ancient Sports
2. Race and Sports
3. Gender and Sports
4. History of Sports 1800-1900s
5. Modern Issues in Sports

**CURRENT EVENTS**

(State Course Code: 04106A000)

**2547 - First or Second Semester**

Grade Level: 9- 12

Credit: ½ (semester course)

Prerequisites: None

This class will provide students with the opportunity to discuss, understand, and explore local, national, international, political, economic and social issues in a respectful, meaningful, and active way. Throughout the term, students will stay up to date on current issues and trends. Because the subject of this class is “contemporary,” topics will vary considerably depending on the current news cycle. Students will be challenged to defend their opinions on many different issues. This course may be taken more than once but only one time per school year.

Unit of Study: (Changes by Semester)

1. Afghanistan
2. COVID
3. Illinois News
4. International Events
5. Current Political Issues

**GLOBAL CONFLICT (WAR)**

(State Course Code: 04065A000)

**2548 - First or Second Semester**

Grade Level: 10 - 12

Credit: ½ (semester course)

Prerequisites: None

This course will aim at promoting the understanding of the major characteristics of wars and global conflicts against the changing political, socio- economic, and technological conditions in which they have taken place throughout history. It will deal with the history of international conflicts and wars, and will investigate the key ideas and issues that have influenced them in the context of numerous case studies.

Unit of Study:

1. Overview of Types of Conflict (War, Genocide, Terrorism, etc.)
2. Ancient Wars (Greece and Rome)
3. Wars in the Middle Ages (Crusades, 100 Years War, etc.)
4. "Modern" Wars (WWI, WII, Korea, Vietnam, etc.)

### **WORLD HISTORY I & II**

(State Course Code: 04051A000)

Grade Level: 10, 11, 12

Credit: ½ per semester (can take up to 2 semester)

A survey of World History from ancient cultures into the 20th Century. Emphasis will be placed on the central historical themes such as Imperialism, Nationalism and racial-religious conflicts, i.e. the Holocaust, European dominance of the Third World and the democratic movements that have shaped the modern world. Students may take the class 1<sup>st</sup> or 2<sup>nd</sup> semester or all year.

#### **WORLD HISTORY I**

##### **2564 - First Semester**

Unit of Study:

1. Students will analyze important events in World History, starting with the Ancient Civilizations and ending with the Renaissance and Reformation.
2. Students will learn the difference between primary and secondary sources. They will learn appropriate ways to analyze these sources and how they add to the understanding of the past.
3. Students will learn different strategies to write using historical content and supporting their claims with evidence.
4. Students will be introduced to basic historical thinking skills like cause/effect and comparisons.

#### **WORLD HISTORY II**

##### **2565 - Second Semester**

Unit of Study:

1. Students will analyze important events in World History, starting with the Age of Absolutism and concluding with modern times.
2. Students will learn the difference between primary and secondary sources. They will learn appropriate ways to analyze these sources and how they add to the understanding of the past.
3. Students will learn different strategies to write using historical content and supporting their claims with evidence.
4. Students will be introduced to basic historical thinking skills like cause/effect and comparisons.

#### **CIVICS**

(State Course Code: 04161A000)

##### **2542 - First or Second Semester**

Grade Level: 12 (required for all graduates)

Credit: ½ (semester course)

This course is designed to provide an in depth instruction of the elements of productive citizenship and includes state-mandated coverage of the U.S. and Illinois Constitutions. Students will also be introduced to the structure of the American form of government, election laws and procedures, and the dynamics of our two-party dominated political system. In addition, course content would include analysis of social issues and events and their presentation by different media forms, critical-thinking projects, and required documented community service activities in cooperation with local social service and government agencies and institutions.

Unit of Study:

1. History of US Government

2. US Government Breakdown (Legislative, Executive, Judicial, Amendments, etc.)
3. Illinois Government Breakdown
4. Constitution Test
5. Modern Political Issues

## **AMERICAN HISTORY**

**(State Course Code: 04101A000)**

**2584 - A - First Semester**

**2585 - B - Second Semester**

*Grade Level: 11(required for all graduates)*

*Credit: 1 (year-long course)*

A survey of American History focusing on the events, movements, and ideas that have shaped the 19<sup>th</sup>, 20<sup>th</sup> centuries and prepare us for the remainder of the 21st.

*Unit of Study:*

1. Students will analyze important events in American History, beginning with the American Revolution and concluding with modern times.
2. Students will learn the difference between primary and secondary sources. They will learn appropriate ways to analyze these sources and how they add to the understanding of the past.
3. Students will learn different strategies to write using historical content and supporting their claims with evidence.
4. Students will learn about the country's founding documents and how they have changed as our country progressed. This notably includes the US Constitution and the addition of amendments.

## **AP EUROPEAN HISTORY**

**(State Course Code: 04056A000)**

**2591 - A - First Semester**

**2592 - B - Second Semester**

*Grade Level: 11-12*

*Credit: 1 (year-long course) (instructor & administrative approval required)*

The AP European History course focuses on developing students' understanding of European history from approximately 1450 to the present. The course has students investigate the content of European history for significant events, individuals, developments, and processes in four historical periods, and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reason, and argumentation) employed by historians when they study the past. The course also provides five themes (interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; and individual and society) that students explore throughout the course in order to make connections among historical developments in different times and place.

This class may be taken to meet a high school graduation credit and for Advanced Placement credit in college. The Advanced Placement Test will be given at Mercer County High School in May. Check with specific colleges for the required AP test score. Students are responsible for all fees associated with AP testing. (Cost of the AP test is approximately \$100.) Students who do not meet the minimum AP score will still receive graduation credit as long as the grade in class is a D or better. This class may require summer course work before class begins.

*Unit of Study:*

1. Students will learn about the major events and movements in Europe from approximately 1450 to modern times.
2. Students will learn how to appropriately use primary and secondary sources to support historical claims.
3. Students will learn various historical thinking skills as determined by College Board, including making comparisons, cause/effect, and chronological reasoning
4. Students will learn how to write historical essays that incorporate historical thinking skills and analysis of sources.

## **D.C. US HISTORY**

**(State Course Code: 04104A000)**

**2550 - A - First Semester (HIST 105)**

**2551 - B - Second Semester (HIST 106)**

*Grade Level: 11 - 12*

*Credit: 1 (year-long course) MCHS (Weighted)- 6 BHC credit hours*

*Prerequisites: Teacher approval*

*(Can count as American History requirement.)*

Dual Credit U.S. History is an introductory college-level U.S. history course. Students cultivate their understanding of U.S. history from c. 1491 CE to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures.

**HIST 105: US History to 1877**

*Prerequisite: Teacher Approval*

*Credit: ½ MCHS (Weighted) - 3 BHC credit hours*

*Unit of Study:*

1. Students will demonstrate knowledge of the basic principles and limitations of the discipline of History
2. Students will appraise the cultural contributions of Europeans, Africans, and Native Americans to contemporary American society.
3. Students will Critically assess the development and expansion of the early United States, especially with regard to: racism, gender issues, social control, social violence, class struggles, evolution of a federal form of government, and regional conflicts which culminated in the American Civil War.
4. Students will differentiate primary and secondary source materials and the application of each within the discipline.
5. Students will demonstrate historical analysis through written work which includes utilization of primary source materials.
6. Students will assess the enormous changes wrought by the American Civil War, upon military, political, and social thought and demonstrate an understanding of the goals, outcomes, and failures of Reconstruction.

\*All learning outcomes determined by history department of BlackHawk College

**HIST 106: US History since 1877**

*Prerequisite: Teacher Approval*

*Credit: ½ MCHS (Weighted) - 3 BHC credit hours*

*Unit of Study:*

1. Students will differentiate primary and secondary sources, use both in analyzing modern U.S. history, and compare and contrast the variety of historical perspectives
2. Students will appraise the social, political, economic and cultural contributions of Americans of different classes, genders, and ethnicities
3. Students will identify and demonstrate an understanding of the characteristics of the “New” South and analyze the emergence of the Jim Crow South
4. Students will analyze the origins, development, and consequences of the United States as a global political and economic superpower
5. Students will critically analyze the ideas, issues, effectiveness, and limitations of the major reform movements of the late 19th and 20th century
6. Students will critically analyze how industrial changes affected the American economy, society, politics, and foreign policy

\*All learning outcomes determined by history department of BlackHawk College

**PSYC 101 - INTRODUCTION TO PSYCHOLOGY Dual Credit**

**1111 - Only First Semester**

*Grade Level: 11-12*

*Credit: ½ (semester course) MCHS (Weighted) -3 BHC credit hrs.*

*3 lecture hours per week- Black Hawk instructor will be on MCHS campus to teach class.*

Fees: Full cost at Black Hawk. (around \$450 plus book) for the class – Tuition is subject to change per Black Hawk.

Prerequisites: Appropriate reading placement score or REA 098, and SBS 100 with a “C” or better.

A survey of the field of general psychology without specific emphasis on any particular theory or model of human or animal behavior. Fundamental principles, methods, theories and issues in the field are discussed. Content areas may

include learning, thinking, neuroscience, methodology, memory, perception, personality, intelligence, emotion, adjustment, and abnormality among others.

*Unit of Study: Learning Objectives*

Upon completion of this course, the student shall be able to:

1. Describe some of the major concepts, theories, and findings from the field of psychology;
2. Demonstrate critical thinking skills to consider and evaluate current research and issues in psychology;
3. Recognize how psychological principles apply to personal and/or social issues;
4. Discuss the APA Code of Ethics
5. Apply psychological concepts and appropriate research to written and/or oral assignments.

**SOC 101 - PRINCIPLES OF SOCIOLOGY Dual Credit**

**2222 - Only Second Semester**

*Grade Level: 11-12*

*Credit: ½ (semester course) MCHS (Weighted) - 3 BHC credit hrs.*

*3 lecture hours per week - Black Hawk instructor will be on MCHS campus to teach class.*

*Fees: Full cost at Black Hawk. (around \$450 plus book) for the class – Tuition is subject to change per Black Hawk*

*Prerequisites: Appropriate placement score or REA 098, and SBS 100 "C" or better.*

Scientific examination of human society and social behavior. Concentrates on human behavior and assumes that it is largely shaped by the groups to which people belong and by the social interaction taking place in these groups. Acquire a basic sociological understanding and sensitivity to the issues of race, class, gender, and ethnicity.

*Unit of Study: Course Objectives*

1. Identify key aspects of major current social problems globally, culturally, and cross culturally
2. Apply theoretical constructs including critical sociology, to analyze the causes, effects, and proposed solutions to current social problems.
3. Analyze the interconnectedness of various social problems.
4. Contrast sociological perspectives, common sense, and media views of social problems.
5. Demonstrate how social problems are relevant to his/her own experience.
6. Demonstrate a sociological understanding of social inequality.
7. Develop analytical, critical thinking, and communication skills necessary to understand social problems.
8. Demonstrate an understanding of the methods of inquiry employed by social and behavioral scientists.

## **PHYSICAL EDUCATION**

All students must be registered for physical education each semester except during the semester when taking health. Students who have medical excuses so stated by a licensed medical doctor are also exempt.

**P.E.**

**(State Course Code: 08001A000)**

**3102 - A - First Semester**

**3122 - B - Second Semester**

*Grade Level: 9-12*

*Credit: ½ per semester (can be a year-long course)*

*Prerequisites: None*

*Fees: Lock \$5 (if lost) Gym shirt \$7 shorts \$10*

This course will introduce each student to a wide variety of team, individual, and life time sport activities that can be carried over in the future. Some possible activities include flag football, volleyball, softball, badminton, Lacrosse, basketball, pickleball, speedball, archery, bowling, bags, nitroball and physical conditioning. Individual skills will be stressed at this level.

*Unit of Study:*

- |                  |               |
|------------------|---------------|
| 1. Archery       | 6. Bags       |
| 2. Softball      | 7. Badminton  |
| 3. Flag football | 8. Pickleball |
| 4. Volleyball    | 9. Basketball |
| 5. Speedball     | 10. Lacrosse  |

- 11. Nitroball
- 12. Bowling

- 13. Physical fitness

**BODY CONDITIONING**

**(State Course Code: 08005A000)**

**3130 - A - First Semester**

**3132 - B - Second Semester**

Grade Level: 9-12

Credit: ½ per semester (can be a year-long course)

Fees: Lock \$5 (if lost) Gym shirt \$7 shorts \$10

**Prerequisites: Students must pass the previous semester of PE, Lifetime Fitness or Body Conditioning with a C- or better. Priority given to athletes.**

This class will involve the development of muscular strength, endurance, in conjunction with speed, agility and balance. Cardiovascular fitness is included. Safety and modern techniques of strength training as well as skill related fitness drills will be emphasized. Class size is limited for student's safety. Journals will be required for students to keep track of his/her progress.

Unit of Study:

- 1. Weight lifting (Squats, Cleans, Jerk, Bench)
- 2. Speed work
- 3. Agility
- 4. Plyometrics

**LIFETIME FITNESS**

**(State Course Code: 08016A000)**

**3123 - A - First Semester**

**3124 - B - Second Semester**

Grade Level: 9-12

Credit: ½ per semester (can be a year-long course)

Fees: Lock \$5 (if lost) Gym shirt \$7 shorts \$10

Prerequisites: None  
This course is designed to improve a student's basic health and fitness foundation. Students will set achievable goals and improve healthy behaviors. This course will provide students with the basic understanding of nutrition, life skills, goal setting, motivation, reducing stress, and improving self-esteem. Students will be required to do low impact cardio, walking, yoga, stretching and relaxation-meditation. Grades will be determined by a daily participation grade and a final exam. (No other exams)

**P.E. Waiver**

**(State Course Code: 08048A000)**

**3222 - A - First Semester**

**3242 - B - Second Semester**

Grade Level: 9 - 12

Credit: Zero

Students with written orders from a licensed physician may obtain a P. E. waiver. With a P. E. waiver students do not participate in P.E. or earn credit but still meet Mercer County High Schools and the state's P.E. requirement for graduation. It is the student's responsibility to file in the main office a written note from a licensed physician stating the time period they are not allowed to participate in Physical Education. A note is required for each semester.

**P.E. Course Load Waiver**

**(State Course Code: 08049A000)**

**3333 - A - First Semester**

**3334 - B - Second Semester**

Grade Level: 11 - 12

Credit: Zero

Administrative approval required

**ATHLETIC P.E.**

The goal of Athletic P.E. is to give junior and senior athletes an opportunity to earn a 1/2 credit of P.E. while participating in sports each semester. Students who actively complete a full season in one or more of the following sports will earn a 1/2

credit of P.E. **Students who drop out of a sport for any reason must complete and submit a drop form to the main office and register for another P.E. class so a 1/2 credit may be earned for that semester.**

**ATHLETIC P.E. WAIVER EXEMPTION**

**(State Course Code: 08002A000)**

**3182 - A - First Semester**

*(Pass/Fail credit, Counts towards graduation but does not count toward GPA)*

*Grade level: 11, 12*

*Credit: ½ (Pass/Fail credit)*

*Fees: None*

Must participate in one or more of the following: football, golf, and volleyball, cross country. (Grading will be pass/fail.) It is the student's responsibility to immediately register for a P.E. class if they do not complete an athletic season. The only exception is when a student has a medical excuse from a doctor.

**ATHLETIC P.E. WAIVER EXEMPTION**

**(State Course Code: 08002A000)**

**3202 - B - Second Semester**

*(Pass/Fail credit, Counts towards graduation but does not count toward GPA)*

*Grade level: 11, 12*

*Credit: ½ (Pass/Fail credit)*

*Fees: None*

Must participate in one or more of the following: baseball, basketball, softball, track, and wrestling. (Grading will be pass/fail.) It is the student's responsibility to immediately register for a P.E. class if they do not complete an athletic season. The only exception is when a student has a medical excuse from a doctor.

**HEALTH**

**HEALTH**

**(State Course Code: 08051A000)**

**3262 - A - First Semester**

**3282 - B - Second Semester**

*Grade Level: 9 & 10 (required for all graduates)*

*Credit: ½ (semester course)*

This required health education course provides students with accurate information which they can utilize to develop healthy attitudes and behavior patterns. Critical thinking and decision making skills are taught and practiced throughout the course as students are encouraged to identify that they have the control to choose healthy behaviors in order to reduce risks. There will be guest speakers throughout the semester, including the Mercer County Health Department, who will present an Abstinence Program. Topics covered in class include: mental health (personality, self-esteem, stress management, mental disorders, and suicide); family and social health (healthy relationships, violence prevention, sexuality, and diversity); human growth and development (reproduction, pregnancy and birth); substance abuse (alcohol, drugs, tobacco, steroids); disease and disorders (infectious disease, AIDS, sexually transmitted diseases, noninfectious diseases and disabilities); personal safety; and First Aid & CPR.

*Unit of Study:*

1. Intro to health skills
2. CPR/First Aid
3. Managing Stress/Mental and Emotional problems
4. Nutrition/Managing weight
5. Healthy/Unhealthy relationships/conflict resolutions
6. Tobacco
7. Alcohol
8. Drugs
9. Sexual Abstinence

**MUSIC**

**JR CHOIR**

**(State Course Code: 05110A000)**

**4002 - A - First Semester**  
**4003 - B - Second Semester**

Grade level: 9

Credit: 1 (year-long course)

Prerequisites: None

Jr Mixed Choir meets five days a week and welcomes all 9th grade Treble and Bass voices at MCHS. Jr Mixed choir performs at a number of functions throughout the year including LTC Festival, MCHS concerts, and IHSA Organizational Contest. Optional participation is offered in the IMEA District Junior, Senior, and Vocal Jazz Choirs, ILMEA All State Concert and Vocal Jazz Choirs, IHSA Solo and Ensemble Contest. Students also have the opportunity to audition to be members of various performing groups, including the MCHS Show Choir and Madrigal Ensemble. Music from various historical periods is covered - Middle Ages, Renaissance, Baroque, Classical, Romantic, Twentieth Century, and Pop. Students learn about proper vocal technique, breathing, sight singing, music reading, and music appreciation. Jr Mixed choir is a prerequisite for our 9th grade singers to be apart of mixed choir in 11th and 12th grade. Only on a case by case basis will an individual be considered to be a part of Sr. Mixed choir not as an 10th-12th grader

**SR MIXED CHOIR**

**(State Course Code: 05110A000)**

**4004 - A - First Semester**  
**4005 - B - Second Semester**

Grade level: 10-12

Credit: 1 (year-long course)

Prerequisites: Jr Mixed Choir (Stipulations include scheduling issues, transfers and other case by case situations)

Concert Choir meets five days a week and is for beginning to advanced singers. Concert Choir performs at a number of functions throughout the year including LTC Festival, MCHS concerts, and IHSA Organizational Contest. Optional participation is offered in the IMEA District Junior, Senior, and Vocal Jazz Choirs, ILMEA All State Concert and Vocal Jazz Choirs, IHSA Solo and Ensemble Contest. Students also have the opportunity to audition to be members of various performing groups, including the MCHS Show Choir and Madrigal Ensemble. Music from various historical periods is covered - Middle Ages, Renaissance, Baroque, Classical, Romantic, Twentieth Century, and Pop. Students learn about proper vocal technique, breathing, sight singing, music reading, and music appreciation.

**BAND**

**(State Course Code: 05101A000)**

Grade Level: 9 - 12

Credit: 1 (year-long course)

Fees: \$20 Uniform Cleaning Fee

To be paid at registration

Prerequisites: Junior High experience, Instructor Approval or Administrative approval

The Mercer County High School band offers a great variety of musical training to help the student appreciate and understand music. The band meets five days per week. Performances include marching at football games and parades, pep-band at basketball games, concerts, IHSA contest, and the Olympic Conference Festival. There are many other performance opportunities including IMEA district/all state, IHSA solo/ensemble and chamber ensembles such as brass quintet, flute choir, clarinet choir, saxophone quartet. The Mercer County High School band gives students the opportunity to excel on their instruments and learn about all aspects of music.

Jazz Band is an extracurricular activity for band students which offer the student an opportunity to play and perform jazz and popular music. The Jazz Band has community performances and participates in college and high school festivals. Membership is chosen through competitive audition and the consent of the instructor.

**FRESH/SOPH BAND**

**4025 - A - First Semester**  
**4026 - B - Second Semester**

Unit of Study:

1. Marching Band (5-6 Performances)
2. Concert Band (3-4 Performances)
3. Pep Band (10-12 Performances)
4. Reading Rhythms in multiple time signatures
5. Major Scales (6)
6. Band will perform music from differing styles
7. Band will perform music at the Medium Easy level

**Jr./Sr. BAND**

**4021 - A - First Semester**  
**4022 - B - Second Semester**

Unit of Study:

1. Marching Band (5-6 Performances)
2. Concert Band (3-4 Performances)
3. Pep Band (10-12 Performances)
4. Reading Rhythms in multiple time signatures
5. Major Scales (8)
6. Band will perform music from differing styles
7. Will perform music at the Medium difficulty level

## **MUSIC THEORY/PERFORMANCE**

**(State Course Code: 05113A000)**

### **4034 - A - First Semester**

### **4035 - B - Second Semester**

*Grade Level: 10-12*

*Credit: 1 (year-long course)*

*Prerequisites: Must be in Band or Chorus or administrative approval*

Music Theory is an in-depth study of the structure of music as it relates to musical notation, melody, harmony, rhythm, meter, and texture. Students must be prepared to study all major/minor scales and modes including all key signatures. In addition, students will apply themselves to analysis of musical scores identifying harmonic intervals, chord structure, chord inversions and chord progressions. Basic chord progressions and voice leading will be played by students on the piano and students will learn sight-singing, dictation and other ear training skills. There will also be opportunities for small performance groups and secondary instrument/vocal groups.

*Unit of Study:*

1. Key Signatures
2. Major/Minor Scales
3. Intervals
4. Rhythmic Notation
5. Sight Singing
6. Concert Performances and study (2)
7. Triads and Inversions
8. 7th Chords
9. Scale degrees

## **MUSIC APPRECIATION**

**(State Course Code: 05118A000)**

### **8298 - First or Second Semester**

*Grade Level: 9 –12*

*Credit: ½ (semester course)*

The purpose of this course is to provide students a basic introduction and background in music listening and history. The focus will be on Western music covering all periods from medieval to modern. The student will develop an understanding of the elements that create music, an ability to identify music by historical periods, and an acquaintance with a wide variety of music styles and forms. This will be accomplished through a variety of listening experiences, including listening and discussion sessions in class and reviewing a concert on video. Topics covered will include: Intro, Medieval Period, Renaissance Period, Baroque Period, Classical Period, Romantic Period, 20<sup>th</sup> Century, Blues, Jazz, Rock n' Roll, and Music/Society.

*Unit of Study:*

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Music in Our Culture</li> <li>2. Music in Other Cultures</li> <li>3. Interpreting Rhythm Through Movement</li> <li>4. Rhythms That Dance</li> <li>5. From the Performers Perspective</li> <li>6. From the Audience's Perspective</li> <li>7. Virtuoso Performers</li> </ol> | <ol style="list-style-type: none"> <li>8. Alone and Together</li> <li>9. The Power of Emotion</li> <li>10. The Beauty of Order</li> <li>11. Music of Our Generation</li> <li>12. Music of our Previous Generations</li> <li>13. Jazz</li> </ol> |
|---|---|

# AGRICULTURE

With Agriculture being more than farming, the course offering can be designed to meet the needs and wants of a variety of individuals. A sequence of study can be designed to fit needs in any of the three following areas: (1) Production, Agriculture, (2) Agri Business, (3) Advanced Education in Agriculture beyond the secondary level.

Study is increased in vegetable propagation, horticulture, and conservation. The Supervised Agricultural Experience Program offers opportunity for individual study while the F.F.A. provides for the development of effective leadership.

**Students taking any Dual Credit courses will be charged through Black Hawk** (Greenhouse Production I & II Dual Credit, Animal Nutrition Dual Credit, Intro to Veterinary Technology Dual Credit, Agricultural Metal Fabrication (Welding) I & II Dual Credit and Agricultural Machine and Power I Dual Credit)

## **INTRODUCTION TO THE AGRICULTURAL INDUSTRY I & II**

**(State Course Code: 18001A001)**

*Grade Level: 9-12*

*Credit: 1 (year-long course)*

### **INTRODUCTION TO THE AGRICULTURAL INDUSTRY I**

#### **4502 - A - First Semester**

*Credit: ½ per semester*

This orientation course provides an opportunity for students to learn how the agriculture industry is organized; its major components; and the scope and types of agriculture at the local, state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in plant science, soil science, horticulture, natural resources, agriculture biotechnology, and environmental science will be presented. The development of leadership, employability and computer skills will be taught. Because the FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged to maintain an SAEPs and to participate in activities of the organization.

### **INTRODUCTION TO THE AGRICULTURAL INDUSTRY II**

#### **4522 - B - Second Semester**

*Credit: ½ per semester*

This orientation course provides an opportunity for students to learn how the agriculture industry is organized; its major components; and the scope and types of agriculture at the local, state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, agribusiness, agriculture mechanics, and agriculture biotechnology will be presented. The development of leadership, employability and computer skills will be taught. Because the FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged to maintain an SAEPs and to participate in activities of the organization.

*Unit of Study:*

1. FFA Unit
2. Parli Pro
3. Plant Science
4. Animal Science
5. Shop Skills

## **BASIC AGRICULTURAL SCIENCE I & II**

**(State Course Code: 18003A001)**

*Grade Level: 9-12*

*Credit: 1 (year-long course) **\*\*Counted as a Science Credit***

### **BASIC AGRICULTURAL SCIENCE I**

#### **4542 - A - First Semester**

*Credit: ½ per semester*

**\*\*Counted as a Science Credit**

This orientation course builds on the basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include: soil science and classification, crop seed identification, weed identification, and judging of grain, soybeans and forages. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. The development of leadership, employability and computer skills will also be taught. Because the FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged to maintain an SAEPs and to participate in activities of the organization.

### **BASIC AGRICULTURAL SCIENCE II**

#### **4562 - B - Second Semester**

*Credit: ½ per semester*

**\*\*Counted as a Science Credit**

This orientation course builds on the basic skills and knowledge gained in the Introduction to the Agricultural Industry course. Major units of instruction include advanced plant science, erosion, crop production, animal science and

agricultural mechanics. Applied Science and math skills and concepts will be stressed throughout the course as they relate to each area. The development of leadership, employability and computer skills will also be taught. Because the FFA and Supervised Agricultural Experience Programs are integral components of this course, students are encouraged to maintain SAEPs and to participate in activities of the organization.

*Unit of Study:*

- |                               |                                   |
|-------------------------------|-----------------------------------|
| 1) Soil Science               | 6) FFA                            |
| 2) Integrated Pest Management | 7) Communication                  |
| 3) Plant Morphology           | 8) Career Readiness Skills - Prep |
| 4) Plant ID                   | 9) SAEs                           |
| 5) Weed ID                    |                                   |

**ENVIRONMENTAL SCIENCE I & II**

**(State Course Code: 18504A001)**

*Grade Level: 10-12 or instructor approval*

*Credit: 1 (year-long course) **\*\*Counted as a Science Credit***

**ENVIRONMENTAL SCIENCE I**

**4724 - A - First Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

This course examines the relationship of agriculture and the environment. The impact of plant and animal production practices on the environment and the adoption of practices leading to improved air, land, and water quality are investigated. Areas of emphasis include: types of ecosystems, management of waste, chemical use, soil conservation, land uses and regulations, and water and air quality. Encouraging students to be conscious and concerned about the environment and recognizing the need to conserve the environment and its resources will be a theme throughout. Careers of environmental technicians, soil and water conservationists, monitoring field technicians, land surveyor, and related occupations will be examined. 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.

*Unit of Study:*

- 1) Forestry
- 2) Hunter Safety
- 3) Ecology

**ENVIRONMENTAL SCIENCE II**

**4725 - B - Second Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

This course focuses on the use and the conservation of agricultural resources. Areas of concentration include protecting the urban and rural environments; identifying tree species and understanding forest ecology; managing the forest and marketing forest products; identifying important wildlife species and their environmental preferences; fish pond ecology and management; wildlife ecology and management; planning and operating a hunting and fishing preserve; and developing a soil and water conservation program. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

*Unit of Study:*

- 1) Wildlife
- 2) Water Conservation
- 3) Air Conservation
- 4) Soil Conservation

**ANIMAL SCIENCE I & II**

**(State Course Code: 18101A002)**

*Grade Level: 10-12*

*Credit: 1 (year-long course) **\*\*Counted as a Science Credit***

**ANIMAL SCIENCE I**

**4563 - A - First Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

**ANIMAL SCIENCE II**

**4564 - B - Second Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

This course will develop students' understanding of the livestock (beef, dairy, sheep, goats, and swine), poultry, and large (equine) animal industry. Topics of instruction include scientific investigations, genetics, animal anatomy and physiology, animal nutrition, animal reproduction, animal health, and meat science. 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.

*Unit of Study:*

1. Animal Species/ Breeds
2. Nutrition
3. Animal Handling
4. Breeding
5. Vet Science

**AGRONOMY I & II**

*Grade Level: 11-12*

**(State Course Code: 18051A003)**

*Credit: 1 (year-long course) **\*\*Counted as a Science Credit***

**AGRONOMY I**

**4565 - A - First Semester**

*Credit: ½ per semester (year-long course) **\*\*Counted as a Science Credit***

**AGRONOMY II**

**4566 - B - Second Semester**

*Credit: ½ per semester (year-long course) **\*\*Counted as a Science Credit***

This course is designed to provide students with the knowledge and skills necessary for future employment in the agronomy or related industries. Major units of instruction include scientific method, cellular biology, genetics, biotechnology, soil classifications, soil erosion and management, soil fertility, plant classification, plant anatomy and physiology, plant propagation, plant growth, integrated pest management, grain, oil, forage, sugar, and fiber crop production methods, grain quality, grain storage, and grain transportation. Applied science and math skills and concepts will be stressed throughout the course as they relate to each area. 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.

*Unit of Study:*

- |                |                                    |
|----------------|------------------------------------|
| 1) Corn        | 6) Test Plots                      |
| 2) Soybeans    | 7) Research                        |
| 3) Wheat       | 8) Integrated Pest Management      |
| 4) Cover crops | 9) Communication                   |
| 5) Weather     | 10) Career Readiness Skills - Prep |
|                | 11) SAEs                           |

**LANDSCAPING AND TURF MANAGEMENT I & II**

*Grade Level: 11-12*

**(State Course Code: 18054A001)**

*Credit: 1 (year-long course) **\*\*Counted as a Science Credit***

**LANDSCAPING AND TURF MANAGEMENT I**

**4567 - A - First Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

**LANDSCAPING AND TURF MANAGEMENT II**

**4568 - B - Second Semester**

*Credit: ½ per semester **\*\*Counted as a Science Credit***

This advanced course focuses on the landscape, nursery, and turf segments of the horticulture industry. Units of student instruction include: identifying landscape plants, designing landscape plans, hardscape construction techniques, and installing landscape plants. Also included are nursery production, turfgrass production, small engine repair, and maintenance of existing landscapes. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising, and sales. 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.

*Unit of Study:*

- |                               |                                       |
|-------------------------------|---------------------------------------|
| 1) Turfgrass Types            | 5) Landscape Design - Paper & Digital |
| 2) Turfgrass Maintenance      | 6) Plant ID - Landscaping Plants      |
| 3) Integrated Pest Management | 7) Landscape Plant Maintenance        |
| 4) Scientific Method          | 8) Landscape Installation             |
|                               | 9) Communication                      |

**GREENHOUSE PRODUCTION I & II HORTICULTURE****(State Course Code: 18053A001)**

Grade Level: 11-12

Credit: 1 (year-long course) Weighted (Dual Credit only) \*Counted as a Science Credit

**GREENHOUSE PRODUCTION I HORT****4731 - Non-Dual Credit - A - First Semester****4730 - DUAL CREDIT - A -First Semester****Black Hawk College Course #294 Greenhouse Management 3 BHC Credit Hours**

Credit: ½ per semester Weighted (Dual Credit only) \*Counted as a Science Credit

*Fees: Students are responsible for BHC fees if they wish to obtain dual credit (\$25 per credit hour) Tuition is subject to change as assigned by BHC. Students may opt to take the course for high school credit only.*

This course focuses on greenhouse management, floral design, and related segments of the horticulture industry. Major units of study include floriculture plant identification, greenhouse structures, and culture of greenhouse crops. Emphasis will be on greenhouse equipment, maintenance, installation and design. Special topics include: fertilizer injectors; pesticide spraying equipment; steam sterilization systems; and heating, cooling and CO<sub>2</sub> units. Methods of energy conservation in the greenhouse, crop fertilization and watering practices will also be covered. Agribusiness units will be introduced in merchandising, advertising, and sales. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

**GREENHOUSE PRODUCTION II HORT.****4735 - Non-Dual Credit - B -Second Semester****4732 - DUAL CREDIT - B - Second Semester****Black Hawk College Course #292 Greenhouse Crops 3 BHC Credit Hours**

Credit: ½ per semester Weighted (Dual Credit Only) \*Counted as a Science Credit

*Fees: Students are responsible for BHC fees if they wish to obtain credit (\$25 per credit hour) Tuition is subject to change as assigned by BHC. Students may opt to take the course for high school credit only.*

This course focuses on greenhouse management, floral design, and related segments of the horticulture industry. Major units of study include care and handling of cut flowers, principles of art applied to floral design, and the mechanics of floral design. This course is designed for major study of greenhouse crops normally produced in the fall/spring or year around. Light, water, fertilization, disease and insect control, use of chemical growth regulators, crop scheduling and cost accounting, and marketing theory are emphasized. Agribusiness units will be introduced in operating a retail floral business. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

**Unit of Study:**

- |                          |                                    |
|--------------------------|------------------------------------|
| 1) Propagation           | 6) Plant ID                        |
| 2) Division              | 7) Sales                           |
| 3) Marketing             | 8) Communication                   |
| 4) Greenhouse Structures | 9) Career Readiness Skills - Prep. |
| 5) Heating/Cooling       | 10) SAEs                           |

**VETERINARY TECHNOLOGY & SMALL ANIMAL CARE****(State Course Code: 18105A001)****4742 - Non-Dual Credit - B - Second Semester****4744 - DUAL CREDIT - B - Second Semester (ONLY)****Into to Veterinary Technology - Black Hawk Course #VT 100 2 BHC Credit Hours**

Grade Level: 11 &amp; 12

Credit: ½ (semester course) (Weighted Dual Credit Only)

**\*\*Counted as a Science Credit**

*Fees: Students are responsible for BHC fees if they wish to obtain credit (\$25 per credit hour) Tuition is subject to change as assigned by BHC. Students may opt to take the course for high school credit only.*

This course will develop students' understanding of the small and companion animal industry, animal anatomy and physiology, animal ethics and welfare issues, animal health, veterinary medicine, veterinary office practices, and animal services to humans. Career exploration will focus on veterinarian, veterinary lab technicians, office lab assistant, small animal production, research lab assistant, and animal nutrition lab technician. 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.

*Unit of Study:*

1. Personal Safety and Animal Handling
2. Animal Roles in Society
3. Veterinary Terminology
4. Care and Management of Species
5. Biosecurity
6. Interconnectedness of Body Systems
7. Purpose, Function, Skeletal System Parts
8. Different Systems of the Body
9. Animal Reproduction and Animal Genetics
10. Pharmacology
11. Parasitology
12. Physical Exams
13. Hospital Procedures

**ANIMAL NUTRITION**

**(State Course Code: 18107A001)**

**4740 - Non-Dual Credit - A - First Semester**

**4743 - DUAL CREDIT - A - First Semester (ONLY)**

**Animal Nutrition - Black Hawk Course #AG 142**

**3 BHC Credit Hours**

*Grade Level: 11 & 12*

*Credit: ½ (semester course) MCHS (Weighted)*

**\*\*Counted as a Science Credit**

*Fees: Students are responsible for BHC fees if they wish to obtain credit (\$25 per credit hour) Tuition is subject to change as assigned by BHC. Students may opt to take the course for high school credit only.*

Animal Nutrition courses provide students with opportunities to study the structure and function of organic and inorganic nutrients. Study of common feeds and their uses in animal nutrition including calculations of rations for maintenance, growth and production. Topics may include the essential nutritive requirements of domestic livestock, poultry, and companion animals; digestion, absorption, metabolism, and barriers for nutrient utilization; sources of nutrients; application of energy systems and concepts; and regulation of feed intake in animals. These courses also teach students how to compare and contrast the nutritional levels for animal maintenance and production.

*Unit of Study:*

1. Nutritional Needs of Animals
2. Beef
3. Swine
4. Sheep/ Goats
5. Poultry
6. Equine
7. Small Pets

**FOOD SCIENCE TECHNOLOGY I & II**

**(State Course Code: 18305A001)**

*Grade Level: 11-12*

*Credit: ½ per semester (semester or year-long course)*

**FOOD SCIENCE TECHNOLOGY I**

**4760 - A - First Semester**

*Credit: ½ per semester*

**FOOD SCIENCE TECHNOLOGY II**

**4761 - B - Second Semester**

*Credit: ½ per semester*

This course provides learning experiences in food science and safety which allow students to apply scientific knowledge and processes to practices used in the development and preservation of food products. Issues of food science and safety are examined from a scientific and technological perspective. Students critically analyze information to evaluate and draw conclusions on the appropriate use of technology to implement food science and safety practices. Units of instruction include: principles of food preservation, food processing, biochemistry of foods, and food selection and consumer health. Careers to be examined include meat inspector, quality control technician, food processor, and sanitation supervisor. Students will use scientific and technological information about food science and safety as a part of developing career plans and personal viewpoints on societal issues concerning the development and preservation of food products. 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.

*Unit of Study:*

1. Dairy
2. College Prep
3. Baking
4. Grilling
5. Meats

### **AGRICULTURAL CONSTRUCTION AND TECHNOLOGY I & II**

**(State Course Code: 18403A001)**

*Grade Level: 11-12 or instructor approval*

*Credit: 1 (year-long course)*

#### **AGRICULTURAL CONSTRUCTION AND TECHNOLOGY I**

##### **4582 - A - First Semester**

*Credit: ½ per semester*

This advanced course focuses on the knowledge, hands-on skills, and workplace skills applicable to construction in the Agricultural Industry. Major units of instruction include: personal safety, surveying, hand tools, power tools, and construction skills in carpentry, drywall and painting. Careers such as carpenter, finishers, safety specialists, agricultural engineers 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.

#### **AGRICULTURAL CONSTRUCTION AND TECHNOLOGY II**

##### **4602 - B - Second Semester**

*Credit: ½ per semester*

This advanced course focuses on the knowledge, hands-on skills, and workplace skills applicable to construction in the Agricultural Industry. Major units of instruction include: personal safety, hand tools, power tools, construction skills in advanced carpentry, electricity, plumbing and concrete, block laying. Careers such as carpenter, finishers, safety specialists, concrete and block layers, agricultural engineers 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.

*Unit of Study:*

- 1) Surveying
- 2) Electricity
- 3) Plumbing
- 4) Masonry
- 5) Carpentry
- 6) Drafting - Paper & Digital
- 7) Communication
- 8) Career Readiness Skills - Prep
- 9) SAEs

### **AGRICULTURAL BUSINESS MANAGEMENT I & II**

**(State Course Code: 18201A001)**

*Grade Level: 11-12 or instructor approval*

*Credit: 1 (year-long course)*

#### **AGRICULTURAL BUSINESS MANAGEMENT I**

##### **4622 - A - First Semester**

*Credit: ½ per semester*

This capstone course is designed to develop student skills in the areas of advanced agricultural business procedures, establishment of an agricultural business, managing an agricultural business, and financing an agricultural business. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

This course meets the requirements for consumer education instruction as required by the School Code of Illinois (Section 27-12.1) Students wishing to meet the state consumer education requirement for graduation must pass Ag.

Business Management I and II. All other juniors and seniors may take Ag. Business Management 1 and/or Ag. Business Mgt. II.

### **AGRICULTURAL BUSINESS MANAGEMENT II**

#### **4642 - B - Second Semester**

*Credit: ½ per semester*

This capstone course is designed to develop student skills in the areas of advanced agricultural business procedures: marketing, advertising, sales techniques for agricultural products and services. Product knowledge is stressed as it relates to the regional agricultural economic base. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

This course meets the requirements for consumer education instruction as required by the School Code of Illinois (Section 27-12.1) Students wishing to meet the state consumer education requirement for graduation must pass Ag. Business Management I and II. All other juniors and seniors may take Ag. Business Management 1 and/or Ag. Business Mgt. II.

*Unit of Study:*

- |  |                                    |
|--|------------------------------------|
| 1) Intro to Agribusiness                   | 7) International Trade             |
| 2) Business Structure                      | 8) Commodity Trading               |
| 3) Business Plans                          | 9) Ag Law                          |
| 4) Record Keeping and Financial Management | 10) Communication                  |
| 5) Taxes                                   | 11) Career Readiness Skills - Prep |
| 6) Marketing                               | 12) SAEs                           |

### **AG COMPUTERS AND TECHNOLOGY I & II (formally CADD)**

**(State Course Code: 18205A001)**

*Grade Level: 11-12*

*Credit: 1 (year-long course)*

#### **AG COMPUTERS AND TECHNOLOGY I**

##### **5225 - A - First Semester**

*Credit: ½ per semester*

#### **AG COMPUTERS AND TECHNOLOGY II**

##### **5226 - B - Second Semester**

*Credit: ½ per semester*

Agriculture Computers and Technology courses help students develop their knowledge and skills in using computers and other technology to operate and manage agricultural businesses. These courses allow students to use computer hardware, software, and the Internet to find information, record and analyze financial and production data, utilize CADD/CAMM software and hardware, monitor weather, utilize global positioning systems, and prepare communications and reports.

*Unit of Study:*

- 1) CADD/CAMM
- 2) Drafting - Paper & Digital
- 3) Communication
- 4) Career Readiness Skills - Prep

### **AGRICULTURAL MACHINERY AND POWER I & II**

**(State Course Code: 18449A001)**

*Grade Level: 11-12 or instructor approval*

*Credit ½ each semester*

\*\*There will be an outside of class requirement of 4 times per semester for work on the current car projects.

#### **AGRICULTURAL MACHINERY AND POWER I**

##### **5662 - A - First Semester**

*Credit: ½ per semester*

This comprehensive machinery service course concentrates on the following areas: assembling and adjusting agricultural equipment, reconditioning and repairing agricultural equipment, and gas welding and cutting. Proper safety and skills will be discussed throughout. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

This course provides theory and welding experience in the flat, horizontal and vertical positions using various joint designs. Various fillet sized and material thickness will be the welding lab experiences. Shop safety will be emphasized.

*Unit of Study:*

- 1) Engine Theory
- 2) Engine Systems
- 3) Measuring Tools

4) Engine Disassembly/Assembly

**AGRICULTURAL MACHINERY AND POWER II**

**5682 - B - Second Semester**

*Credit: ½ per semester*

This comprehensive machinery service course concentrates on the following areas: using service manuals, fundamentals of multi-cylinder engines; basic hydraulics, power transfer systems, multi-cylinder engine overhaul, diesel theories of operation, organization and management of agricultural machinery dealerships, human relations, and sales techniques. Proper safety and skills will be discussed throughout. Because FFA and SAEPs are integral components of this course, students are encouraged to maintain SAEPs and to participate in the activities of the FFA organization.

*Unit of Study:*

- 1) Car Restoration
  - a) Brakes
  - b) Suspension
  - c) Electrical
  - d) Paint/Body
  - e) Interior
- 2) Misc. Restoration Projects

**ADVANCED AGRICULTURAL MACHINERY AND POWER I & II**

**(State Course Code: 18447A000)**

*Grade Level: 12 and Instructor approval required*

*Credit ½ each semester*

*\*\*Prerequisite: C or better in Ag Machine & Power I & II*

**ADVANCED AGRICULTURAL MACHINERY AND POWER I**

**5663 - A - First Semester**

*Credit: ½ per semester*

Class available to Seniors who have successfully completed the Ag Mach/Power class. Instructor approval required.

**ADVANCED AGRICULTURAL MACHINERY AND POWER II**

**5683 - B - Second Semester**

*Credit: ½ per semester*

Class available to Seniors who have successfully completed the Ag Mach/Power class. Instructor approval required.

**AGRICULTURAL METAL FABRICATION I & II (Welding)**

**(State Course Code: 18401A002)**

*Grade Level: 11 - 12*

*Credit ½ each semester at MCHS (can be year-long course) Weighted (Dual Credit only)*

*Credit: 3 credits first semester and 5 credits second semester for Black Hawk College*

*Fees: Student is responsible for BHC fees if they wish to obtain dual credit. (\$25 per credit hour) Tuition is subject to change as assigned by BHC. Students may opt to take the course for high school credit only.*

*\*\*Prerequisite: DC Welding I needs to be taken before DC Welding II*

Students will complete the following BHC welding coursework for Ag. Metal Fabrication I & II: WLD 101 Intro to Arc Welding, WLD 102 Basic Arc Welding in Flat Position, WLD 105 Oxyacetylene Welding and Cutting, WLD 103 Arc Welding in Flat and Horizontal Position, WLD 117 Arc Welding in Vertical Position and WLD 120 Intro to MIG Welding. These courses 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.

**AGRICULTURAL METAL FABRICATION I (Welding)**

**5693 - Non-Dual Credit - A- First Semester**

**5692 - DUAL CREDIT - A -First Semester**

**3 BHC Credit Hours**

*Unit of Study:*

- 1) Safety
- 2) Oxy-Acetylene Cutting/Welding
- 3) Arc Welding-Flat position

**AGRICULTURAL METAL FABRICATION II (Welding)**

**5695 - Non-Dual Credit - B - Second Semester**

**5694 - DUAL CREDIT - B - Second Semester**

**5 BHC Credit Hours**

Unit of Study:

- 1) Arc Welding-Out of position
- 2) MIG Welding
- 3) TIG Welding

**ADVANCED WELDING I & II**

**(State Course Code: 18447A000)**

Grade Level: 12 and Instructor approval required

Credit ½ each semester

\*\*Prerequisite: C or better in Dual Credit Ag Metal Fabrication (Welding) I & II

**ADVANCED WELDING I**

**5690 - A - First Semester**

Credit: ½ per semester

Class available to Seniors who have successfully completed the Welding DC class. Instructor approval required.

**ADVANCED WELDING II**

**5691 - B - Second Semester**

Credit: ½ per semester

Class available to Seniors who have successfully completed the Welding DC class. Instructor approval required.

**CO-OP EDUCATION CLASS I & II**

**(State Course Code: 22153A001)**

Grade Level: 11-12 by application only

Credit: 1 (year-long course)

Cooperative Education is a capstone course designed to assist students in the development of effective skills and attitudes through practical, advanced instruction in school and on the job through cooperative education. Students are released from school for their paid cooperative education work experience and participate in 200 minutes per week of related classroom instruction. Classroom instruction focuses on providing students with job survival skills and career exploration skills related to the job and improving students' abilities to interact positively with others. For skills related to the job, refer to the skill development course sequences, the task list or related occupational skill standards of the desired occupational program. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job-seeking skills, personal development, human relationships, legal protection and responsibilities, economics and the job, organizations, and job termination. A qualified career and technical education coordinator is responsible for supervision. Written training agreements and individual student training plans are developed and agreed upon by the employer, student and coordinator. The coordinator, student, and employer assume compliance with federal, state, and local laws and regulations. \*Must be scheduled with CO-OP WORK EXPERIENCE

**CO-OP EDUCATION CLASS I**

**5696 - A - First Semester**

Credit: ½ per semester

Unit of Study:

- 1) Job Skills
- 2) Credit

**CO-OP EDUCATION CLASS II**

**5697 - B - Second Semester**

Credit: ½ per semester

Unit of Study:

- 1) Insurance
- 2) Taxes
- 3) Business Structures
- 4) Law

**CO-OP WORK EXPERIENCE I & II**

**(State Course Code: 22998A000)**

Grade Level: 11-12 by application only

Credit: 1 (year-long course)

**CO-OP WORK EXPERIENCE I**

**5698 - A - First Semester**

Credit: ½ per semester

**CO-OP WORK EXPERIENCE II**

**5699 - B - Second Semester**

Credit: ½ per semester

Miscellaneous—Workplace Experience courses provide students with work experience in a field related to their interests. Goals are typically set cooperatively by the student, teacher, and employer (although students are not

necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Note: if the particular subject area is known, use the code associated with the Workplace Experience course within that subject area. \*Must be scheduled with CO-OP EDUCATION CLASS

## **INDUSTRIAL ARTS**

### **INTRODUCTION TO WOODWORKING**

**(State Course Code: 13052A001)**

**5403 - A - First Semester**

**5404 - B - Second Semester**

*Grade Level: 9-12                      Credit: 1 (year-long course)                      Fees: varies by project (range between \$60 - \$75)*

*Prerequisites: None*

This is a course that provides the students with an introduction to the common hand and power tools used in a woodworking shop. Students will learn how to safely operate these tools to perform basic woodworking tasks and learn wood-jointing techniques. During the course, students will construct and finish several projects. Students are responsible for the cost of materials for each project.

*Unit of Study:*

1. Fractions of the Inch
2. Machine Safety
3. Woodworking Operations
4. Project 1 Toolbox
5. Project 2 Shelf
6. Project 3 Side Table
7. Project 4 (as time allows) Bench/Gun Rack/Keepsake Box

### **WOODWORKING PRODUCTION**

**(State Course Code: 17007A001)**

**5413 - A - First Semester**

**5414 - B - Second Semester**

*Grade Level: 10                      Credit: 1 (year-long course)                      Fees: varies by project (range between \$100-\$150)*

*Prerequisite: Introduction to Woodworking and administrative approval*

First semester covers basic hand tools and basic machine operations, furniture construction methods and finishing methods necessary in the carpentry trades. Skills will be developed through projects completed by the students. Emphasis is placed on proper use and safe operation of woodworking and carpentry equipment. Students will also be introduced to some basic CAD programming.

Second semester, students refine their skills through projects and group work. A student may increase his knowledge of machine operations, furniture construction methods. Special attention will be given to those machine operations necessary in the carpentry trades. Particular emphasis is placed on the correct use and safe operation of woodworking and carpentry equipment. Group work includes the construction of cabinet furniture or other kinds of mass-produced wooden products as a medium for training. Students are responsible for the cost of materials for each project.

*Unit of Study:*

1. Machine Safety
2. Project 1 Hope Chest
3. Wood Identification
4. Boardfeet Calculations
5. Mass Production Fundraising Project
6. Project 2 Student Choice (within time and ability level)

### **ADVANCED WOODWORKING**

**(State Course Code: 17007A002)**

**5423 - A - First Semester**

**5424 - B - Second Semester**

*Grade Level: 11, 12 and administrative approval      Credit: 1 (year-long course)      Fees: varies by project*

*Prerequisite: Woodworking Production and Instructor's permission*

This course is to refine their skills through individual projects and group work. Group work includes the construction of cabinetry, furniture and other kinds of mass produced wooden projects. Students will be exposed to more CAD programming and will complete detailed drawings. Students are responsible for the cost of materials for each project.

*Unit of Study:*

1. Machine Safety
2. Individual Project Work

## **FURNITURE DESIGN**

**(State Course Code: 17007A002)**

**5433 - A - First Semester**

**5434 - B - Second Semester**

*Grade Level: Seniors only and administrative approval      Credit: 1 (year-long course)      Fees: varies by project*

*Prerequisite: Intro to Woods, Woodworking Production and Advanced Woods and Instructor's permission*

*Students must be a senior who has previously completed the 3 other wood classes offered with a B or higher grade. Students must also get the permission of the teacher to take the class in the spring before enrolling in the class.*

The class will focus on using a computer CAD program to design a piece of furniture. All joinery and detail must be illustrated. Students will then make their own bill of materials and calculate the total cost of the project. The student will then take the plan and construct and finish the project. Students will be responsible for the cost of all materials used and should expect to spend \$200-\$500 (Cost is based on the cost of previous projects done that would be suitable for this class).

*Unit of Study:*

1. Machine Safety
2. Individual Project Work

## **BUILDING TRADES**

**(State Course Code: 17002A001)**

**5435 - A - First Semester**

**5436 - B - Second Semester**

*Grade Level: 12*

*Credit: 1 per semester (2 class period (year-long course))*

*Prerequisite: Intro to Woods and Woodworking Production or instructor approval*

This course provides experiences related to the erection, installation, and maintenance of residential buildings and related fixtures. Planned learning activities allow students to understand fundamental principles and methods, and develop technical skills related to masonry, carpentry, and finish work. Instruction includes safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, state, and national codes, cost estimating, and blueprint reading. Construction trade career research and exploration are also a part of this course. Off site work is a possibility as well as jobsite tours.

*Unit of Study:*

1. Career Explorations
2. Tool and Machine Safety Review
3. Building Materials
4. Fundamentals of Framing
5. Storage Shed Project
6. Fundamentals of Electricity and Wiring
7. Practice Wiring Problems
8. Shed Project 2

## **BUSINESS EDUCATION**

The student gains skills for initial employment and develops an understanding to the world of business through the business courses offered below. It is recommended that every student enroll in at least one semester of Information Processing plus an additional computer class to assist students in typing research papers and other class assignments.

**INFORMATION PROCESSING IA (B310)**

**(State Course Code: 10005A001)**

**5027 - First or Second Semester**

*Grade Level: 9-12*

*Credit: ½ (semester course)*

This course is geared toward helping students develop their computer skills for their high school career and beyond. If you are planning on going straight into the workforce or an apprenticeship after high school, this course is for you! Course work will be completed using the Google Apps suite.

*Unit of Study:*

1. Google Drive
2. Gmail
3. Google Docs
4. Google Slides
5. Google Forms
6. Google Drawings
7. Google Sites

**INFORMATION PROCESSING IB (B310)**

**(State Course Code: 10005A001)**

**5028 - Second Semester**

*Grade Level: 9-12*

*Credit: ½ (semester course)*

If you are planning on going to college or work in an office setting after high school, this class is for you! Through this course students will become familiar with the basic functions and features of the following Microsoft Office programs: Word, Excel, Access, and PowerPoint.

*Unit of Study:*

1. Introductory Microsoft Word
2. Introductory Microsoft Excel
3. Introductory Microsoft PowerPoint
4. Introductory Microsoft Access

**INFORMATION PROCESSING II**

**(State Course Code: 10005A002)**

**5035 - A - First Semester**

**5036 - B - Second Semester**

*Grade Level: 10-12*

*Credit: 1 (year-long course)*

*Prerequisites: Information Processing IA & IB*

Students will take the skills learned in Information Processing IA & IB to the next level. They will create and update documents using word processing and desktop publishing programs and put together slideshows, speaker notes and handouts using presentation software.

*Unit of Study:*

1. Intermediate Microsoft Word
2. Intermediate Microsoft Excel
3. Intermediate Microsoft PowerPoint
4. Intermediate Microsoft Access

**ACCOUNTING I (B300)**

**(State Course Code: 12104A001)**

**5061 - A - First Semester**

**5062 - B - Second Semester**

Grade Level: 11-12

Credit: 1 (year-long course)

Prerequisites: (Recommend a C or better in Math I)

Does your future include a degree in business, marketing, management, finance or even cosmetology? No matter what field you choose, an accounting course will likely be required. Why not learn the basics of accounting first to help prepare you for a future accounting class. Accounting has many benefits, regardless of your career choice. The study of accounting is interesting and fun, yet thought-provoking. You will use the Peachtree, the accounting software used by many local businesses, to complete several assignments. Through accounting simulations, students apply their knowledge of accounting to real-world situations. Upon completion of accounting, students will have the basic understanding needed to succeed in future accounting courses at the university or technical college level.

Unit of Study:

1. Accounting for a Service Business Organized as a Proprietorship
  - a. The Accounting Equation
  - b. Analyzing/Journalizing/Posting Transactions
  - c. Cash Control Systems
  - d. Financial Statements for a Proprietorship
2. Accounting for a Merchandising Business Organized by a Corporation
  - a. Purchases/Cash Payments/Sales/Cash Receipts
  - b. Preparing Payroll Records/Payroll/Payroll Taxes
  - c. Uncollectible Accounts Receivable
  - d. Financial Statements for a Corporation

## **ACCOUNTING II (B400)**

**(State Course Code: 12104A001)**

**5066 - A - First Semester**

**5067 - B - Second Semester**

Grade Level: 12

Credit: 1 (year-long course)

Prerequisites: Accounting I

Give yourself the edge in future accounting courses by completing a second year of high school accounting. It is a well-known fact that the first few weeks of college accounting equals one year of high school accounting. Strengthen your accounting skills by studying a merchandising corporation. Use simulations and computer software to enhance your knowledge.

Unit of Study:

1. Accounting for a Merchandising Business Organized as a Corporation
  - a. Acquiring Capital for Growth and Development
  - b. Plant Assets, Depreciation, and Intangible Assets
  - c. Inventory
  - d. Accruals, Deferrals, and Reversing Entries
  - e. End-of-Fiscal Period Work for a Corporation
2. Excel For Accounting
3. Access for Accounting

## **WEB PAGE DESIGN & INTERACTIVE MEDIA DEVELOPMENT I (B320)**

**(State Course Code: 10201A001)**

**5233 - A - First Semester**

**5234 - B - Second Semester**

Grade Level: 10-12

Credit: 1 (year-long course)

Have fun designing web pages using HTML, CSS, Dreamweaver, and Movie Plus. Learn the dos and don'ts of web page design by evaluating existing web pages. In addition students will use Flip video cameras and Movie Plus to create and edit videos.

Unit of Study:

1. HTML
  - a. Getting Started with HTML & CSS

- b. Designing a Page Layout
  - c. Graphic Design with CSS
  - d. Designing a Mobile Website
2. Dreamweaver
    - a. Getting Started with Dreamweaver
    - b. Webpage Text and Links
    - c. Graphic Elements and Templates
    - d. Tables and Forms
  3. Intro to Video Game Design

**WEB PAGE DESIGN & INTERACTIVE MEDIA DEVELOPMENT II (B420) (State Course Code: 10201A002)**

**5239 - A - First Semester**

**5240 - B - Second Semester**

*Grade Level: 11-12*

*Credit: 1 (year-long course)*

*Prerequisite: Web Page Design I*

Focus on expanding your web design skills and build on what you learned in the first course. You'll explore several advanced features of Dreamweaver, Javascript, and PHP. Build on your existing Dreamweaver skills, and become familiar with several interactive design techniques using an animation editor. Individual and group projects are assigned, and frequently involve the creation of "real world" interactive websites.

*Unit of Study:*

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Advanced HTML           <ul style="list-style-type: none"> <li>a. Tables and Columns</li> <li>b. Designing a Web Form</li> <li>c. Enhancing a Website with Multimedia</li> <li>d. Getting Started with JavaScript</li> <li>e. Working with Events and Styles</li> </ul> </li> <li>2. Video Game Design           <ul style="list-style-type: none"> <li>a. Software Basics</li> </ul> </li> </ol> | <ol style="list-style-type: none"> <li>b. Click Ball</li> <li>c. Quality Assurance</li> <li>d. Scene Construction</li> <li>e. Iterative Design and the Scientific Method</li> <li>f. Digital Art</li> <li>g. Parent and Child Objects</li> <li>h. Graphing Game Coordinates</li> </ol> |
|---|--|

**CONSUMER EDUCATION**

**(State Course Code: 22210A000)**

**3650 - First or Second Semester**

*Grade Level: 12*

*Credit: ½ (semester course)*

This course focuses on the understanding and skills needed to make decisions about the use of resources as a consumer and prevention strategies which contribute to an improved quality of life. The course content includes the following duty areas: utilizing resources and consumer information by applying goal-setting and decision-making skills; evaluating use of resources to meet social, physical and psychological needs; maintaining health standards by applying safety information; applying consumer rights and responsibilities in the marketplaces; accomplishing mutual goals by utilizing human resources; and analyzing resource consumer management skills necessary to make decisions.

This course meets the requirement for consumer education instruction as required by the School Code of Illinois (Section 27-12.1). Instruction will include credit/installment purchasing, budgeting, buying goods and services, comparison of prices, banking, insurances, housing, saving/investments, social security and taxes, and an understanding of the roles of consumers interacting with agriculture, business, labor unions and government in formulating and achieving the goals of the mixed free enterprise system.

*Unit of Study:*

1. Taxes
2. Checking
3. Savings
4. Paying for College
5. Credit

6. Investing
7. Insurance
8. Budgeting

## **FOREIGN LANGUAGE**

A foreign language is a course of study that should be considered at the high school level for two primary reasons. A language background could be a very valuable auxiliary skill in securing a job in this ever-changing international economic society. Also, anyone entering a four year university may be required to study a foreign language. The required work and ability at the college level can be difficult and time consuming. Taking a foreign language during high school can help alleviate stressful concerns.

### **SPANISH I**

**(State Course Code: 06101A000)**

**6004 - A - First Semester**

**6005 - B - Second Semester**

*Grade Level: 9 - 12*

*Credit: 1 (year-long course)*

Spanish I is designed to introduce a beginning language student to the basic skills of language learning: comprehension, speaking, reading and writing. The course is taught with a conversational approach where the students are speaking and interacting on a daily basis. The student is taught the basics of foreign language, which is considerably different from other studies. The course of study covers situations the student may find themselves in to include family, food, sports, activities, etc. During this year course emphasis is placed on learning to appreciate and understand the culture and customs of the many Spanish speaking countries.

*Unit of Study:*

1. basic introductory vocab throughout the year
2. basic introductory grammar throughout the year
3. practice writing, listening and speaking in Spanish throughout the year

### **SPANISH II**

**(State Course Code: 06102A000)**

**6024 - A - First Semester**

**6025 - B - Second Semester**

*Grade Level: 10, 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Spanish I*

This course is a continuation of Spanish I and expands his/her abilities and vocabulary in a year long course. It is the goal of this course to advance the student to the point that he/she will be able to express themselves on many subjects and to make culture comparisons without cultural judgments. The student will continue extensive oral practice and learn to express him/herself in a more advanced manner. Students also learn through situational exercises.

*Unit of Study: Areas of Concentration*

1. Acquire language using ACTFL Standards and benchmarks to achieve a Proficiency Level of Novice Mid - Novice High
2. Communicate and use circumlocution
3. Read materials within target language and structures.
4. Write within target language and structures.
5. Build on to base knowledge obtained in Spanish I.

### **SPANISH III**

**(State Course Code: 06103A000)**

**6044 - A - First Semester**

**6045 - B - Second Semester**

*Grade Level: 11, 12*

*Credit: 1 (year-long course)*

*Prerequisites: Spanish I & II*

Spanish III is designed as a year-long course in preparing students for their future careers and/or university studies. This type of study will expand the student's vocabulary, improve their ability to express themselves in written Spanish and further their development of the oral skills through extensive and varied oral activities. Students will be exposed to various Spanish media.

*Unit of Study: Areas of Concentration*

1. Acquire language using ACTFL Standards and benchmarks to achieve a Proficiency Level of Novice High - Intermediate Low
2. Communicate and use circumlocution
3. Read a variety of materials.
4. Write about several topics.
5. Build on to base knowledge obtained in Spanish II.

## **SPANISH IV**

**(State Course Code: 06104A000)**

**6064 - A - First Semester**

**6065 - B - Second Semester**

*Grade Level: 12*

*Credit: 1 (year-long course)*

*Prerequisites: Spanish I, II, & III*

Students taking this course will experience a review of the language from the grammatical aspect in preparation for university proficiency and CLEP exams. Special emphasis is placed on learning and using the subjunctive mood and advanced commands. In addition to the grammar review they will increase their vocabulary usage. This class will offer the student a chance to become familiar with some Spanish and Latin American Literature through the reading of short stories, dramas and excerpts from novels/newspapers and/or magazines. Emphasis is placed on oral competency and comprehension.

*Unit of Study: Areas of Concentration*

1. Acquire language using ACTFL Standards and benchmarks to achieve a Proficiency Level of Intermediate Low - Intermediate Mid
2. Communicate and use circumlocution
3. Read a variety of materials
4. Write about a variety of topics
5. Build on to base knowledge obtained in Spanish III.

## **ART**

The department feels that everyone has the ability to have successful experiences in art. Furthermore, the department believes the creative experiences, which is the power to imagine and visualize the world around us, broadens human understanding.

Students are encouraged to purchase a sketchbook of choice, but not required.

### **INTRODUCTION TO ART I & II**

**(State Course Code: 05156A000)**

*Grade Level: 9-12*

*Credit: ½ per semester (can be a year-long course)*

*Prerequisites: None*

**INTRODUCTION TO ART I**

**8003 - First Semester**

**INTRODUCTION TO ART II**

**8005 - Second Semester**

**The above courses may be taken for a year or just a semester in any order.** This course is a foundation program instilling a strong basic vocabulary of technique, terms, and materials upon which students build their further studies. Projects are presented in the context of art history. A wide variety of procedures and approaches are introduced, stressing a workable solution to project assignments.

*Unit of Study:*

1. Elements and Principles
2. Contour Line
3. Watercolor Techniques
4. Gothic Architecture/Radial Design
5. Grid Drawing
6. Still-Life Drawing
7. Acrylic Painting Techniques
8. 3-D (if time allows)

**STUDIO ART I-VI**

**(State Course Code: 05155A000)**

*Grade Level: 10-12*

*Credit: ½ per semester (can be a year-long course)*

*Prerequisites: Must have previously taken Intro to Art, 2D Design or Studio Art I, II, III, IV, V, & VI will cover drawing and painting.*

**8270 STUDIO ART I - A - First Semester**

**8271 STUDIO ART II - B - Second Semester**

**8272 STUDIO ART III - A - First Semester**

**8273 STUDIO ART IV - B - Second Semester**

**8274 STUDIO ART V - A - First Semester**

**8275 STUDIO ART VI - B - Second Semester**

This class is designed for the student that enjoys art and is ready to take an advanced approach. Allows students to experiment with mixed media and subjects while taking a more creative and personal approach to their work.

*Unit of Study:*

- 1) Elements of Art
- 2) Principles of Design
- 3) Line Quality/Abstraction
- 4) Human Anatomy: Bones/Muscles/Figure Study
- 5) Portraiture
- 6) Still Life
- 7) My Refuge
- 8) Social/Political/Moral topics in Art

**2-D Design**

**(State Course Code: 05162A000)**

**8226 - A - First Semester**

*Grade Level: 9-12*

*Credit: ½ (semester course)*

The two-dimensional design course offers students an opportunity to learn and organize visual images through the understanding of visual elements, line, shape, tone, texture, and volume. Students examine and apply design principles such as repetition, variety, and movement. Emphasis is on simple graphic skills.

Students must have a three-ringed binder that is used solely for art class (1-2 inches is acceptable.) It is also recommended that each student have a soft pencil case that can be attached into the binder.

*Unit of Study:*

1. Elements and Principles
2. Positive/Negative Space
3. Stylization
4. Checkerboard Design
5. Metamorphosis
6. Collage
7. Creative Color Wheel
8. Freestyle/Asymmetrical Design

**3-D DESIGN****(State Course Code: 05158A000)****8230 - B - Second Semester***Grade Level: 9-12**Credit: ½ (semester course)**Prerequisites: Intro to Art or 2-D Design*

Students will review the elements and principles of design and be challenged to create their ideas in a 3-dimensional form. This will include a variety of media including plaster, cardboard, clay, etc.

*Unit of Study:*

1. Elements and Principles of Art and Design
2. Alexander Calder-Inspired Wire Sculpture
3. Enlarging Ordinary Objects
4. Found-Object Sculpture
5. Clay Techniques

**PORTFOLIO DEVELOPMENT****(State Course Code: 05170A000)****8363 - A - First Semester****8364 - B - Second Semester****(Must have instructor's approval)***Grade Level: 11-12**Credit: 1 (PASS/FAIL ONLY) (year-long course)**Prerequisites: Introduction to Art, plus one semester of any other art class*

This class is designed for the student who wants to develop a portfolio and specialize in one or two areas of art. The course/projects will be designed through a student/teacher conference. A course of study will be determined and a contract for the work issued. Portfolio critiques and self-evaluation will be part of the class work.

*Unit of Study:*

1. Independent Work
2. Usually taken in conjunction with AP Art to allow students extra studio time to complete their portfolio

**PRE-AP STUDIO ART****(State Course Code: 05170A000)****8365 - A - First Semester****8366 - B - Second Semester****(Must have instructor's approval)***Grade Level: 10-11**Credit: 1 (year-long course)**Prerequisites: At least one year of high school art AND teacher approval*

This course offers students the opportunity to begin the development of a portfolio based on the criteria for AP Studio Art. Students will be exposed to a variety of media and techniques and will be challenged to express their own ideas and interests through a collection of ongoing art work. Students who possess a strong interest in the visual arts and are seeking to further develop skill and creativity are encouraged to take this course.

*Unit of Study:*

1. <https://pre-ap.collegeboard.org/pdf/pre-ap-art-sampler-2018.pdf>

**AP STUDIO ART I, II, & III****(State Course Code: 05171A000)****AP STUDIO ART I****8369 - A - First Semester****8371 - B - Second Semester****AP STUDIO II (DRAWING)****8373 - A - First Semester****8374 - B - Second Semester****AP STUDIO III (3-D DESIGN)****8375 - A - First Semester****8376 - B - Second Semester****(Must have instructor's approval)**

Grade Level: 11-12

Credit: 1 (year-long course)

Prerequisites: Instructor and administrative approval

The AP Studio Art course is designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written examination; instead, students will develop portfolios to be submitted for evaluation at the end course. The AP Program offers three portfolios: Drawing, 2-D Design, and 3-D Design. The student must show a fundamental competence and range of understanding in visual concerns (and methods). Each of the portfolios asks the student to demonstrate a depth of investigation and process of discovery through the **Concentration** section (Section II). In the **Breadth** section (Section III), the student is asked to demonstrate a serious grounding in visual principles and material techniques. The **Quality** section (Section I) permits the student to select the works that best exhibit a synthesis of form, technique, and content. . Students are responsible for all fees associated with the AP Portfolio. (Cost of AP Portfolio is approximately \$100.)

Unit of Study:

1. [AP Art and Design Program - AP Students | College Board](#)

## SPECIAL OPPORTUNITIES

### DRIVER EDUCATION

(State Course Code: 08152A000)

**7530 - A - First Semester**

**7535 - B - Second Semester**

Grade Level: 9-10

Credit: ½ (semester course)

Classroom Fees: \$100.00 MCHS (subject to change) Plus \$20.00 State Fee (subject to change)

Students must pass all classes the semester before they enroll in Driver Education. Classroom attendance is required. The State of Illinois requires at least 30 hours in the classroom. The state does not differentiate between excused or unexcused absences.

Students are registered for Driver Education the sophomore or freshman year according to their birth date. Students must be 15 years old and enrolled in a Driver Education class in order to obtain a permit. Driver Education is taught in two phases – classroom for 1/2 credit, and behind-the-wheel instruction for no credit.

The course is designed to introduce young drivers to the skills and knowledge needed to better operate a motor vehicle in our transportation system. Prior to completion of the semester the student will have met State of Illinois requirements in order to apply for and obtain an Illinois operator's license. Regular attendance in the course is required to meet the 30 hour state requirement.

#### Reminder:

- **Students must be 15 years old and enrolled in a Driver Education class in order to obtain a permit.**
- **If your permit test (pay \$20 to take and when passed – received your permit) is failed the first time, you have 2 more opportunities to take the test with your driver's education instructors before paying \$20 for 3 more tries.**
- **Class fees are due by a time set by the teacher (within the first month after class begins).**
- **If a student is failing multiple classes, they will not drive (no dresses in P.E. count towards this).**

Unit of Study: Drive Right Chapters

CH.1	HTS, IPDE Intro., Driving responsibilities, GDL	CH. 9	Gravity & Energy of Motion
CH. 2	Signs, Signals, Roadway Markings	CH. 10	Intersections
CH. 3	Vehicle Controls, Getting Ready to Drive, Hand Position	CH. 11	Pedestrians
CH. 4	BTW	CH. 12	Adverse Conditions
CH. 5	IPDE, Zone Control	CH. 13	Handling Emergencies
CH. 6	Emotions, Physical Senses, Temporary Disabilities	CH. 14	City Driving
CH. 7	Alcohol and Drugs	CH. 15	Rural Driving
CH. 8	Distracted Driving	CH. 16	Highway Driving
		CH. 17	Buying and Maintaining a Vehicle
		CH. 18	Planning Your Travel

**AUDIO/VIDEO ENGINEERING & THEATER PRODUCTION****(State Course Code: 11051A001)****7777 - A - First Semester**

Grade Level: 9-12

Credit: 1/2 (semester course)

Prerequisites: none

Audio/Video Engineering & Theater Production will cover topics including live audio engineering, studio audio recording, audio post-production, live video production, studio video recording, video post-production, audio/video equipment setup and usage, as well as light design and engineering. Students will learn how to use each piece of equipment used in live theatrical productions and live video productions while serving an important role for the school district by engineering productions and streaming events. This class requires students to offer their time outside of class to cover or engineer events.

Unit of Study:

1. Live and Prerecorded Video Production
2. Lighting Design and Control
3. Sound Design and Control
4. Video and Audio Post-Production

**PHOTOGRAPHY/YEARBOOK****(State Course Code: 12001A001)****5019 - First AND Second Semester**

Grade Level: 10-12 (9th with Teacher Approval only)

Credit: 1 (year-long course)

Prerequisite: At least one semester of Art OR with Teacher Approval

Equipment Required:

SD Memory Card

Digital Camera (Digital SLR cameras are useful, but not necessary).

This course teaches students basic photography techniques using manual setting on Canon and Nikon DSLR cameras. Students will also learn the fundamental skills needed to build a successful school yearbook. Editing programs and creating layouts using computer technology are a major part of the class, as well as the business aspects of advertising and book sales.

Students will be required to do some work outside of class time and will be assigned to specific tasks. There will be additional opportunities for creative freedom with subject matter, editing options and layouts. Please contact the instructor if you have questions.

**8502 - SPECIAL NEEDS****9502 - SPECIAL NEEDS**

Grade Level: 9 - 12

Credit: Open

Prerequisites: MDC/IEP multi-disciplinary conference/Individual Ed. Plan

Students who qualify may receive credit through the special needs program. Training is available in academic subject areas as well as work experience. Some students may also qualify for Secondary Transitional Experience Program (STEP). This program is designed to improve vocational skills, self confidence, and work habits. Up to two hours per day are allowed for selected students to work on or off campus. Off campus positions must be within the Aledo/Joy business community.

**SUPPORT SERVICES****(State Course Code: 22006A000)****999011 (first year taking) - A - First Semester****999012 (first year taking) - B - Second Semester****SUPPORT SERVICES II NC****999021 (2<sup>nd</sup>- 4<sup>th</sup> year taking) - A - First Semester****999022 (2<sup>nd</sup>- 4<sup>th</sup> year taking) - B - Second Semester**

(Pass/Fail credit, Counts towards graduation but does not count toward GPA) Pass/Fail credit may be earned for 1 year only.

Grade Level: 9, 10, 11, 12

Credit 1

Prerequisites: *Administrative Approval*

This course is designed for students who are in need of extra help organizing and preparing for the rigors of high school curriculum. Its purpose is to provide additional support for students who need help with basic grade level skills. Support Services is open to students in every grade; however may only be taken for credit one year. This is a Pass/Fail class and does not count toward GPA.

## STUDY HALL

(State Course Code: 22006A000)

**999997 - A - First Semester**

**999998 - B - Second Semester**

Grade Level: 9 - 12

Credit: Zero

Prerequisite: May only have one year long study hall per school year.

Study hall is designed to provide a quiet environment for students to complete homework. Students may use the LRC and computers as space and supervision is available.

## ELEMENTARY CADET TEACHING - (K - 8)

(State Course Code: 19198A000)

**9922 - First and/or Second Semester**

(Pass/Fail credit, Counts towards graduation but does not count toward GPA)

Grade Level: 12

Credit: 1 or 1/2 (Pass/Fail credit)

This course is designed to acquaint them with the major theories and concepts about play and creativity through related instruction, actual teaching and working with children in a school based setting. The students will apply their understanding and learn interaction techniques with children in a way that enhances child development. The students will learn to construct play environments and plan activities which promote creativity. The techniques of observation, participation, planning and evaluation of the children as individuals and as a group will assist the students in hands-on application. The students will be in a supervised classroom. Contact the counselor's office for additional information.

## CADET TEACHING - (9 - 12), ½ credit per semester (State Course Code: 19199A000)

**9929 - A - First Semester**

**9930 - B - Second Semester**

(Pass/Fail credit, Counts towards graduation but does not count toward GPA)

Grade Level: 12

Credit: 1 or 1/2 (Pass/Fail credit)

Cadet teacher is a semester long assignment. The work of the cadet teacher is to perform specific tasks for the classroom teacher to whom they are assigned. The goal is for the cadet teacher to assist the teacher in creating an effective learning atmosphere. Students are assigned to cadet teaching if their course requirements are met and their schedule permits. Contact the counselor's office for additional information.

## ON-LINE ILLINOIS VIRTUAL SCHOOL COURSES

**9940 - First and/or Second Semester**

Grade Level: 11, 12

Credit: ½ credit per semester Fees: \$250

Prerequisite: *Administrative approval*

A limited number of on-line instructor led courses will be available at Mercer County High School through the Illinois Virtual School Program. Course work will be offered on a limited basis to students in grades 11 and 12. The on-line courses will be taught by federally designated, highly-qualified teachers and will offer high school credit. *Students and parents are entirely responsible for all course related expenses for each semester. For more information and a list of courses offered please contact the counselor's office at 309-582-2223 Ext. 3.*

## ON-LINE COLLEGE CLASSES

**9955 - First and/or Second Semester**

Grade Level: 11, 12

Credit: ½ credit per semester **\*\*Non-weighted\*\***

*Tuition & Fee: Parents/students are responsible for all tuition, books and fees for on-line college classes. Students will be billed directly from the college or university that provides the course work.*

*Prerequisite: Administrative approval*

On-line classes will be offered on a limited basis for highly motivated, academically strong college bound students attending Mercer County High School. Students may earn college credit or dual credit (high school (unweighted) & college credit). Student will need prior approval from the College, parents and principal. Students must complete a College application and take the appropriate entrance placement test. Courses we offer at MCHS will not be approved to take as an on-line course. Please contact the counselor's office for additional information.

\*\*\*\*\* Highlighted areas are new courses or changes to old courses\*\*\*\*\*