## Mercer County High School



## 2024-2025

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 2024-2025 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.

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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), classes offered at Mercer County High School, plus a description of each course you might take, including prerequisites and fees (pages 11-63).

Each student will be provided a registration packet listing required classes and electives appropriate to their grade level as well as individualized recommendations for courses based on the Accelerated Placement Act (105 ILCS 5/14A-17) and teacher recommendation. 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.

Mrs. Hainds - Class of 2026 and 2028
Mrs. Staker - Class of 2025 and 2027
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.
Disclaimer: Only schedule corrections will be made. If you are scheduled in a class you selected, no changes will be made unless it is a correction.

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.

Freshman-Juniors are required to register for at least 7 credits.
Seniors vary based on their credits needed and situation.

## Graduation Requirements for Mercer County High School

| English (4 credits) <br> English I, English I Honors, English II, English II Honors, <br> English II, English III Honors \& 1 credit of a combination of <br> English IV, Eng. IV Comp. I \& II, Technical English I \& II, Ag <br> Communication \& Leadership I \& II | 4 credits total |
| :--- | :--- |
| Social Science (2 credits) <br> American History or DC US History (1 credit) <br> Civics (1/2 credit) <br> Social Science Elective (1/2 credit) | 2 credits total |
| Mathematics (3 credits) <br> Geometry content [(Informal Geometry) /(Geometry)] (1 credit) <br> Additional Math (2 credits) | 3 credits total |
| Science (3 credits) <br> 2 years of Lab Science <br> Biology (1 cr.) Additional Science (2 credits) | 3 years total |
| Physical Education ( $\mathbf{4}$ credits) <br> (1/2 credit may be waived during the semester in which Health <br> is taken) | 4 credits total |
| Health (1/2 credit) | $1 / 2$ credit total |
| Information Processing 1 or Computer Concepts and <br> Applications (1 credit) | 1 credit total |
| Consumer Education (1/2 credit) <br>  <br> II or Work Based Learning Class I \& II) | $1 / 2$ credit total OR 1 credit total for Ag |
| Business OR Work Based Learning Class |  |
| Additional Electives | 18 |
| Total credits to graduate from <br> Mercer County High School | 9 |
| Community Service Hours | $\mathbf{2 7}$ credits |

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 during civics class. 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 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.)

## 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
2. Select your choices early so that you can research the colleges. 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 \& career fairs when appropriate. (MCHS \& Black Hawk College holds one 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 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: $\qquad$ Date of Request:

Probable Graduation Date: $\qquad$

## *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 $7^{\text {th }}$ 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 (English I, English I Honors, English II, English II Honors, English III, English III Honors \& 1 credit of a combination of English IV, Eng. IV Comp. I \& II, Technical English I \& II, Ag Communication \& Leadership I \& II).)

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 (JR/SR may waive for athletic participation, $J R / S R$ for course load, and/or
Fresh/Soph for Health)

Information Processing or Computer Concepts \& Software Applications - 1 credit

General Electives - 9 credits

Total Credits Required = 27
Community Service Hours Required = 25

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 $\qquad$ Date: $\qquad$

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 $\qquad$ Date: $\qquad$

School Counselor Certification: "I certify that $\qquad$ 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 $\qquad$ Date: $\qquad$
Principal Approval: $\quad$ Approved $\quad$ Not Approved
Principal Signature

Superintendent Approval: ___ Approved
Superintendent Signature $\qquad$ Date Not Approved
$\qquad$

## Board Approval:

 Approved $\qquad$ Not ApprovedBoard Signature $\qquad$ Date $\qquad$

# NCAA FRESHMAN-ELIGIBILITY STANDARDS <br> www.ncaa.org <br> QUICK REFERENCE 

## KNOW THE RULES:

## Core Courses

NCAA Division I requires 16 NCAA approved 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.
Division I-2.3
Division II- 2.2

## 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 Website to make certain that courses being taken have been approved as core courses. The Website is www.eligibilitycenter.org.

Division I grade-point-average 2.3.
The Division II grade-point-average requirement is a minimum of 2.2.

```
DIVISION I
16 Core-Course Rule
16 Core Courses:
4 years of English.
years of mathematics (Algebra I or higher).
years of Lab Science
year of additional English, Mathematics, or Science
2 years of social science.
4 years of additional courses (from any area above,
foreign language or nondoctrinal religion/philosophy).
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DIVISION II
16 Core-Course Rule
    16 Core Courses:
3 years of English.
2 years of mathematics (Algebra I or higher).
2 years of Lab Science
3 years of additional English, Mathematics or Science
2 years of social science.
4 years of additional courses (from any area above,
foreign language or nondoctrinal religion/philosophy).
```


## 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 102 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 2024-2025 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/WIU-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. 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)
2. Must meet the SAT placement score or 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.

## 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. A/I 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 DESCRIPTIONS

## 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)

## 1003-Year

## 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 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/or 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?

## HONORS ENGLISH I

(State Course Code: 01051A000)
9003 - Year
Grade Level: 9
Credit: 1 (year-long course)
Prerequisites: appropriate placement score, a "B" average from previous year of English, Counselor/Teacher approval.
English I is an enriched introductory course 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/or 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.
Units of Study:

1. Divided We Fall-Why do we feel the need to belong?
2. The Call to Adventure-What will you learn on your journey?
3. Declaring Your Genius-How do you define intelligence?
4. The Art of Disguise-How do we perform for different audiences?
5. The Dance of Romance-When is love worth the fall?
6. Human Potential-How can you help others achieve their goals?

## ENGLISH II W (Writing Intensive)

(State Course Code: 01002A000)

## 1013-Year

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 writing 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.

## Units 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?

## HONORS ENGLISH II (Writing Intensive)

(State Course Code: 01101A000)
9013- Year
Grade Level: 10
Credit: 1 (year-long course)
Prerequisites: appropriate placement score, a "B" average from previous year of English, Counselor/Teacher approval.
English II Honors is an enriched grammar, composition, and literature course. Composition will include sentence combining and revising, paragraph development. Students will write in argumentative, narrative, informational, and/or 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.
Units 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: $11 \quad$ 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. 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. Breaking Away-How does independence define the American spirit?
2. The Highway-How do journeys influence perspective?
3. No Strangers Here-How does place shape the individual?
4. Living the Dream-What does home mean to you?
5. The Wars We Wage-What does it mean to win?
6. With Malice Toward None- How can we attain justice for all?

## HONORS ENGLISH III (Writing Intensive) (Computer Literacy Based) (State Course Code: 01054A000)

## 9024 - Year

Grade Level: 11
Credit: 1 (year-long course)
Prerequisites: appropriate placement score, a " $B$ " average from previous year of English, Counselor/Teacher approval.
English III is an enriched course in which students will study various authors in American Literature over different time periods in America's history. 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. 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.

## Units of Study:

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

## TECHNICAL ENGLISH I

(State Course Code: 01156A000)

Prerequisite: English II, Appropriate Career pathway matches, Counselor/Teacher approval
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: $1 / 2$ (semester course)
Prerequisite: English II, Appropriate Career pathway matches, Counselor/Teacher approval
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 <br> 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. In addition, the English IV curriculum may include a unit on careers and post-secondary options.

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: $\$ 90$ per semester plus books. Tuition is subject to change as assigned by Black Hawk College
Prerequisites: Writing = appropriate placement score; or ENG 091 "C" or better or Eng 100 "C" or better or concurrent enrollment in ENG 100 AND Reading = appropriate placement score or REA 103 " $C$ " or better Appropriate Career pathway matches, A "B" average from English III, Counselor/Teacher approval.
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 $1 / 2$ (semester) MCHS (Weighted) - 3 BHC credit hours
Fees: $\$ 90$ 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.
Units 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 and Canvas submission of Research Essay Credit $1 / 2 \quad$ (semester) MCHS (Weighted) - 3 BHC credit hrs.
Fees: \$90 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. Units 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

GENERAL ENGLISH
(State Course Code: 01999A000)
7055 - Year
Grade Level: 9-12
Credit: $1 / 2$ (per semester)
Prerequisites: Administrative Approval
General English is focused on the broad spectrum of English and Language Arts. The course content is designed
to be a slower-paced and tiered version of the general education English classes. Each section is generally divided into grades $9-10$ and 11-12 sections. Each section is set up to provide similar instruction and content to English $1 \& 2$ for the grades 9-10 section and English 3 \& tech English for grades 11-12.

9-10 Section: This section focuses on a combination of literary analysis of poetry and novels with a focus on basic reading comprehension, basic writing skills and basic grammar usage.
11-12 Section: This section focuses on enhancing reading comprehension, further developing grammar usage, and writing mechanic skills. This section also will focus on real-world applications of grammar and writing including resume writing/development, problem solving skills, and communication skills.
*See the English 1, 2, 3, and Tech English descriptions for further detail on course content.

## AG COMMUNICATION \& LEADERSHIP I \& II

Grade Level: 11 \& 12 (Seniors have priority)
Credit: 1 (year-long course)**Counted as an English Credit
Prerequisites: 3 years of English, at least 2 years of Ag , and administrative approval.

## AG COMMUNICATION I

(State Course Code: 18203A002)
4762 - First Semester
Credit: $1 / 2$ per semester (year-long course)
This course introduces the broad field of agriculture communications and provides for the development of knowledge and skills in specific areas related to communications theory and practice. Content includes the meaning and process of communication, the role and history of print and electronic media, legal aspects of agricultural communications, news and feature writing in agriculture, news photography, layout and design, and ethics in agricultural communication. Content will also include web design and broadcast journalism in agriculture. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects are an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

## Units of Study:

1. Intro to Communications
2. Verbal Communications
3. Written Communications
4. Visual Communications

## AG LEADERSHIP II

4763 - Second Semester

## 5. Journalistic Writing Skills <br> 6. Broadcasting, Multimedia, \& Other Online Communications <br> 7. Communication for Specific Audiences <br> 8. Careers in Communications

(State Course Code:18203A003)
Credit: ½ per semester (year-long course)

Agricultural Leadership courses help students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries.Topics may include, but are not limited to, human relationships and effective communication, decision making and problem solving, leadership qualities and styles, and ensuring the successful completion of group activities. Students will learn to lead groups and teams, manage volunteers, exercise leadership ethics, and be able to demonstrate leadership in multicultural settings. 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.
Units of Study:

1. Intro to Leadership
2. "Me" Skills: Honesty, Goals, Responsibility, Accountability, \& More
3. "We" Skills: Team Expectations, Decision Making in Groups, Conflict Mediation, \& More
4. "Do" Skills: Developing Presentations, Developing Workshops, Using Key Messaging as a Leader \& More
5. "Serve" Skills: Finding Opportunities to Serve, Developing a Plan to Serve, Taking Action to Serve, Advocating for Continued Service, and More.
6. Serving as a Leader in our School and Community.

## 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

## 1495-Year

## 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.

## Units 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

## HONORS FRESHMAN PHYSICS

(State Course Code:03199A000)

## 9495-Year

Grade Level: 9
Credit: 1 (year-long course)
This course is designed to give the students an honors-level view of physics. This advanced freshman-level course will review, enhance, and add to physics principles that students have encountered prior to entering high school by delving deeper into the physics content. 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.

## Units 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, $12 \quad$ 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.
Units of Study:

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

BIOLOGY
1523 - Year
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.
Units 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)

## HONORS BIOLOGY



## 9523 - Year

Grade Level: 10-11 Credit: 1 (year-long course)
Biology, the study of life, explores the major kingdoms, interaction with each other and the environment. Topics include cells, genetics, diversity and continuity, biochemistry, and taxonomy. During this fast paced course, students will learn using critical thinking skills and applied knowledge. S.T.E.M. (Science Engineering Technology and Math) projects will enhance the learning experience and stimulate discovery and inquiry. The hands-on laboratory will expand the understanding of concepts, through contact with the organisms being studied, as well as analysis in experiments. Students will be expected to apply information taught, as well as research related topics.

## AP BIOLOGY

(State Course Code: 03056A000)
1605-A - First Semester
1606-B - Second Semester
Grade Level: 11, $12 \quad$ Credit: 1 (year-long course)
Prerequisites: Must have completed a minimum of Algebra 2, 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. Units 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

1544-A - First Semester
1545-B - Second Semester
Grade Level: 11, 12
Prerequisites: Biology
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.
Units of Study:

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

## ZOOLOGY

1564-A - First Semester 1565-B - Second Semester
Grade Level: 11, 12
Credit: 1 (year-long course)
Prerequisites: Biology
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.
Units of Study:

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

1. Measurement
2. Matter and Energy
3. Atomic Structure
4. Nucleus and Radioactivity
5. Nomenclature and Formula Writing
6. Bonding
7. Equations
8. Chemical Quantities
9. Stoichiometry

## PRE AP CHEMISTRY I

(State Course Code: 03106A001)
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 and Geometry (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
Units of Study:

1. Chemistry Preamble
2. Matter and Energy
3. Atomic Structure
4. Bonding and Nomenclature
5. Equations
6. Reactions in Solutions
7. Chemical Quantities
8. Stoichiometry
9. Gasses

## 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 (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.

## Units of Study:

1. Atomic Structure and Properties
2. Molecular and lonic compounds and properties
3. Intermolecular Forces
4. Chemical Reactions
5. Kinetics
6. Thermodynamics
7. Equilibrium
8. Acids and Bases
9. Electrochemistry

## PHYSICS I

(State Course Code: 0315A000)
1624-A - First Semester
1625-B - Second Semester
Grade Level: 11, 12
Credit: 1 (year-long course)
Prerequisites: Biology, Chemistry I/Pre AP Chem, Algebra I, Geometry, Algebra 2 (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.

## Units 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)
Credit: 1 (year-long course)
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.

## Units of Study:

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

## ENVIRONMENTAL SCIENCE I \& II

Grade Level: 10-12 or instructor approval

## ENVIRONMENTAL SCIENCE I

4724-A - First Semester
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.
Units of Study:

1) Forestry
2) Hunter Safety
3) Ecology

## ENVIRONMENTAL SCIENCE II

## 4725 - B - Second Semester

Credit: $1 / 2$ 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.
Units of Study:

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

ANIMAL SCIENCE I \& II
Grade Level: 10-12
ANIMAL SCIENCE I
4563-A - First Semester

## ANIMAL SCIENCE II

## 4564-B - Second Semester

(State Course Code: 18101A002)
Credit: 1 (year-long course) **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

## CROP SCIENCE I \& II (formerly AGRONOMY)

(State Course Code: 18051A003)
Grade Level: 11-12
CROP SCIENCE I
4565-A - First Semester
CROP SCIENCE II
4566-B - Second Semester Credit: $1 / 2$ 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.
Units of Study:

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

## 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 HORT4731 - Non-Dual Credit - A - First Semester 4730 - DUAL CREDIT - A -First Semester

Black Hawk College Course \#294 Greenhouse Management 3 BHC Credit Hours
Credit: $1 / 2$ 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 (\$30per 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 CO2 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 <br> 4732 - DUAL CREDIT - B - Second Semester <br> Black Hawk College Course \#292 Greenhouse Crops 3 BHC Credit Hours <br> Credit: $1 / 2$ per semester Weighted (Dual Credit Only) *Counted as a Science Credit

Fees: Students are responsible for BHC fees if they wish to obtain credit (\$30 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.
Units of Study:

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

VETERINARY TECHNOLOGY \& SMALL ANIMAL CARE
4742 - Non-Dual Credit - B - Second Semester
4744 - DUAL CREDIT - B - Second Semester (ONLY)
Intro to Veterinary Technology - Black Hawk Course \#VT $100 \quad 2$ BHC Credit Hours

## Grade Level: 11 \& 12

Fees: Students are responsible for BHC fees if they wish to obtain credit (\$30 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.

## Units 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

4740 - Non-Dual Credit - A - First Semester 4743 - DUAL CREDIT - A - First Semester (ONLY) Animal Nutrition - Black Hawk Course \#AG 142
Grade Level: 11 \& 12

## ANIMAL NUTRITION

8. Different Systems of the Body
9. Animal Reproduction and Animal Genetics
10. Pharmacology
11. Parasitology
12. Physical Exams
13. Hospital Procedures
(State Course Code: 18107A001)

3 BHC Credit Hours
Credit: $1 / 2$ (semester course) MCHS (Weighted)
**Counted as a Science Credit

Fees: Students are responsible for BHC fees if they wish to obtain credit (\$30 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.
Units of Study:

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

## INTRO TO FOOD SCIENCE

4758 - Year
Grade Level: 10-11
(State Course Code: 18305A001)

## Credit: $1 / 2$ per semester *Counted as Science Credit

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 inspectors, quality control technicians, food processors, and sanitation supervisors. 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. Hands-on labs are a part of this course, but the focus is on classroom work. This course serves as a prerequisite for the Applied Food Science Course. 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.

## 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

## 2004- Year

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

## ALGEBRA I

13. Transformations, Congruence, and Similarity

## 2028- Year

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

## INFORMAL GEOMETRY

(State Course Code: 02071A000)

## 2016 - Year

Grade Level: 10-12
Credits: 1 (year-long course)
Prerequisites: Algebra 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
2. Quadrilaterals
3. Basics of Geometry
4. Segments and Angles
5. Parallel and Perpendicular Lines
6. Triangle Relationships
7. Similarity
8. Polygons and Area
9. Surface Area and Volume
10. Congruent Triangles
11. Right Triangles And Trigonometry
12. Circles

## GEOMETRY

2070 - Year
Grade Level: 9-12 Credit: 1 (year-long course)
Prerequisites: Algebra 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
2. Angles and Geometric Figures
3. Logical Arguments and Line Relationships
4. Transformations and Symmetry
5. Triangles and Congruence
6. Relationships in Triangles
7. Quadrilaterals
8. Similarity
9. Right Triangles and Trigonometry
10. Circles
11. Measurement
12. Probability

## ALGEBRA II

(State Course Code: 02056A000)
2080-A - First Semester
2081-B - Second Semester
Grade Level: 10, 11, $12 \quad$ Credit: 1 (year-long course)
Prerequisites: Algebra I and Geometry 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.
Units of Study:

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

## TRANSITIONAL MATH TM002

(State Course Code: 02201A001)
2112-Year
Grade Level: $12 \quad$ Credit:1 (year-long course) (semester of 092 \& semester of 094)
Prerequisites: Successful completion of 3 years of math
Math course framework designed to prepare and transition students directly into college and career pathways requiring general education college level math competencies in quantitative literacy and statistics. The competencies
within each domain should include but are not limited to: numeracy (operation sense, estimation, measurement, quantitative reasoning, basic statistics, and mathematical summaries), application based algebraic topics, and functions and modeling. Upon completion students should be able to: demonstrate proficiency and understanding in basic numeracy competencies in whole numbers, integers, fractions, and decimals, use estimation and explain/justify estimates, apply quantitative reasoning to solve problems involving quantities or rates, use mathematical summaries of data such as mean, median, and mode, use and apply algebraic reasoning as one of multiple problem-solving tools, and use functions and modeling processes. Course to be delivered through authentic application, problem-based instruction designed to build mathematical conceptual understanding and critical thinking skills.

## PRE-CALCULUS

(State Course Code: 02110A000)

## 2124-A - First Semester <br> 2125-B - Second Semester

Grade Level: 11, 12
Credit: 1 (year-long course)
Prerequisites (not concurrently): Algebra I, Geometry , Algebra II, 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.

## Units of Study:

1. PreRequisite Review
2. Common Functions
3. Intro To Vectors
4. Partial Fraction Decomposition
5. Quadratic Functions
6. Counting and Probability
7. Intro to Limits
8. Slope of Secant (Average Rate of Change)
9. Rational Functions
10. Exponential Functions
11. Difference Quotient
12. Derivative
13. Trigonometry

## CALCULUS

(State Course Code: 02121A000)

## 2140-A - First Semester

## 2141 - B - Second Semester

Grade Level: 12
Credit: 1 (year-long course)
Prerequisites: Algebra I, Geometry, Algebra II 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.

## Units 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: 02124A000)
2144-A - First Semester
2145-B - Second Semester
Grade Level: 12
Credit: 1 (year-long course)
Prerequisites: Algebra I, Geometry, Algebra II 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. Units 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

## STATISTICS

(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, Geometry, 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.

## Units 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 - Year

Grade Level: 10, 11, $12 \quad$ Credit: 1 (year-long course)
Prerequisites: Geometry
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 a given constraint. Students will gain the ability to work in teams. This class works towards applying math, physics and engineering.

## Units of Study:

Introduction to Solar Cars
Introduction to Lego Mindstorms
Programming
Projects:
Driving Forward
Shooting a Basket
TP Dispenser
Loading Dock

## GENERAL MATH

(State Course Code:02002A000)
7124 - Year
Grade Level: 9-12

Stair Climber Battlebot<br>Introduction to Tetrix<br>Can Crusher<br>Shirt folder<br>Color Sorter<br>Syrup Pour<br>Remote Control

Prerequisites: Administrative Approval
This course introduces and re-introduces fundamental math concepts to better prepare high school students for post-secondary skills. These fundamental concepts are: computation using integers, place value for whole numbers and decimals, fractions, decimals,proportions, percents, an overview of measurement, linear equations, money, money management, and pre-algebraic equations. This course provides a mathematical foundation upon which other areas of Math such as pre-algebra, algebra,geometry, and other math areas depend.
These skills could be applied to further post-secondary education such as community college, vocational or training schools. Furthermore the aim of this course is to prepare students for entry into the workforce, if they so choose.

Most importantly, the course is designed to prepare students for the real world, everyday life and skills where mathematical skills are a necessity.

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: $1 / 2$ 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.
Units 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

## 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

## 2502 - First or Second Semester

Grade Level: 9-12
Credit: $1 / 2$ (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. Units of Study:

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

## HOLOCAUST

(State Course Code: 04065A000)

## 2545 - First or Second Semester

Grade Level: 11-12
Credit: $1 / 2$ (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.

## Units 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.

## Units 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: 11-12
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.
Units 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: 04110A000)

## 2548 - First or Second Semester

Grade Level: 10-12
Credit: $1 / 2$ (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.
Units 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 <br> 

Grade Level: 9-12
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 $1^{\text {st }}$ or $2^{\text {nd }}$ semester or all year.

## WORLD HISTORY I

2564 - First Semester
Units 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
Units 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

2542 - First or Second Semester
Grade Level: 12 (required for all graduates)
(State Course Code: 04161A000)
Credit: $1 / 2$ (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.

## Units 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 $19^{\text {th }}, 20^{\text {th }}$ centuries and prepare us for the remainder of the 21st.
Units 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.

## Units 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.
(State Course Code: 04149A000)

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

Grade Level: 11-12
Prerequisites: Teacher approval
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 Units 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: $1 ⁄ 2$ MCHS (Weighted) - 3 BHC credit hours
Units of Study:
7. Students will differentiate primary and secondary sources, use both in analyzing modern U.S. history, and compare and contrast the variety of historical perspectives
8. Students will appraise the social, political, economic and cultural contributions of Americans of different classes, genders, and ethnicities
9. Students will identify and demonstrate an understanding of the characteristics of the "New" South and analyze the emergence of the Jim Crow South
10. Students will analyze the origins, development, and consequences of the United States as a global political and economic superpower
11. Students will critically analyze the ideas, issues, effectiveness, and limitations of the major reform movements of the late 19th and 20th century
12. 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

## WOMEN'S HISTORY

(State Course Code: 04062A000)
2593 - First or Second Semester
Grade Level: 11-12 Credit: $1 / 2$ (semester course)
This course will examine the unique history of women from colonial to contemporary times. Using both primary and secondary sources, we will examine how women contributed to the cultural, social, and political development of the United States. The course will explore the differences in the experience of women based on both race and class, among other
factors. While this course will primarily focus on the experience of women in the United States, the course will explore the history of women in other parts of the world as well.

## PSYC 101 - INTRODUCTION TO PSYCHOLOGY Dual Credit

(State Course Code: 04254A000) 1111 - Only First Semester
Grade Level: 11-12
Credit: $1 / 2$ (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 $\$ 500$ 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.
Units 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 102 - PRINCIPLES OF SOCIOLOGY Dual Credit

(State Course Code: 04258A000)

## 2222 - Only Second Semester

Grade Level: 11-12
Credit: $1 / 2$ (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 $\$ 500$ 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.

## Units 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.
(State Course Code: 08001A000)
3102-A - First Semester
3122 - B - Second Semester
Grade Level: 9-12
Credit: $1 / 2$ per semester (can be a year-long course)

Fees: Lock $\$ 5$ (if lost) Gym shirt $\$ 7$ shorts $\$ 10$
This course will introduce each student to a wide variety of team, individual, and lifetime 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.
Units of Study:

1. Archery
2. Pickleball
3. Softball
4. Basketball
5. Flag football
6. Lacrosse
7. Volleyball
8. Nitroball
9. Speedball
10. Bowling
11. Bags
12. Physical fitness
13. Badminton

## BODY CONDITIONING

3130-A - First Semester
3132-B - Second Semester
Grade Level: 9-12
(State Course Code: 08005A000)

Credit: $1 / 2$ 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.

## Units 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
Prerequisites: None


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: 08014A000)

## 3182-A - First Semester

(Pass/Fail credit, Counts towards graduation but does not count toward GPA)
Grade level: 9-12 Credit: $1 ⁄ 2$ (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: 08014A000)

## 3202-B - Second Semester

(Pass/Fail credit, Counts towards graduation but does not count toward GPA)
Grade level: 9-12
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

## 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.

## Units 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

4000- Year
Grade level: 9
Prerequisites: None
Jr Mixed Choir meets five days a week and welcomes all 9th grade Treble and Bass voices at MCHS. Jr Mlxed 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.

## CHAMBER CHOIR <br> 4006- Year

Grade Level: 9-12
Credit: 1 (year-long course)
The Chamber Choir course integrates advanced elements of choral music's auditory, vocal, kinesthetic, and aesthetic dimensions through analysis, rehearsal, and performance. Particular attention will be paid to ensemble participation in rehearsal and performance. The Chamber Choir meets five days a week and is an audition group for our advanced singers. The Chamber Choir performs at several functions throughout the year, including the LTC Festival, MCHS concerts, and the IHSA Organizational Contest.

Optional participation is offered in the ILMEA 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 different 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
Grade Level: 9-12

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

## 4024 - Year

## 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 <br> 4021-A - First Semester <br> 4022-B - Second Semester <br> Unit of Study:

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

## MUSIC THEORY/PERFORMANCE

4034-A - First Semester
4035-B - Second Semester
Grade Level: 10-12
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.
Units 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 ${ }^{\text {th }}$ Century, Blues, Jazz, Rock n' Roll, and Music/Society.
Units of Study:

1. Music in Our Culture
2. Music in Other Cultures
3. Alone and Together
4. Interpreting Rhythm Through Movement
5. The Power of Emotion
6. Rhythms That Dance
7. The Beauty of Order
8. From the Performers Perspective
9. Music of Our Generation
10. From the Audience's Perspective
11. Music of our Previous Generations
12. Jazz
13. Virtuoso Performers

## 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 <br> Credit: 1 (year-long course)

## INTRODUCTION TO THE AGRICULTURAL INDUSTRY I

## 4502-A - First Semester <br> Credit: $1 / 2$ 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: $1 / 2$ 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.
Units of Study:

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

## AG COMMUNICATION \& LEADERSHIP I \& II

Grade Level: 11 \& 12 (Sr's have priority) Credit: 1 (year-long course)**Counted as an English Credit Prerequisites: 3 years of English, at least 2 years of Ag , and administrative approval.

## AG COMMUNICATION I

(State Course Code: 18203A002)

## 4762 - First Semester

Credit: $1 / 2$ per semester (year-long course)
This course introduces the broad field of agriculture communications and provides for the development of knowledge and skills in specific areas related to communications theory and practice. Content includes the meaning and process of communication, the role and history of print and electronic media, legal aspects of agricultural communications, news and feature writing in agriculture, news photography, layout and design, and ethics in agricultural communication. Content will also include web design and broadcast journalism in agriculture. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects are an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

## Units of Study:

5. Intro to Communications
6. Journalistic Writing Skills
7. Verbal Communications
8. Broadcasting, Multimedia, \& Other Online Communications
9. Written Communications
10. Communication for Specific Audiences
11. Visual Communications
12. Careers in Communications

## AG LEADERSHIP II

(State Course Code:18203A003)

## 4763 - Second Semester

Credit: $1 / 2$ per semester (year-long course)
Agricultural Leadership courses help students develop leadership skills with a focus on opportunities in the food, fiber, and natural resources industries.Topics may include, but are not limited to, human relationships and effective communication, decision making and problem solving, leadership qualities and styles, and ensuring the successful completion of group activities. Students will learn to lead groups and teams, manage volunteers, exercise leadership ethics, and be able to demonstrate leadership in multicultural settings. 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:

7. Intro to Leadership
8. "Me" Skills: Honesty, Goals, Responsibility, Accountability, \& More
9. "We" Skills: Team Expectations, Decision Making in Groups, Conflict Mediation, \& More
10. "Do" Skills: Developing Presentations, Developing Workshops, Using Key Messaging as a Leader \& More
11. "Serve" Skills: Finding Opportunities to Serve, Developing a Plan to Serve, Taking Action to Serve, Advocating for Continued Service, and More.
12. Serving as a Leader in our School and Community.

ENVIRONMENTAL SCIENCE I \& II
Grade Level: 10-12 or instructor approval

## ENVIRONMENTAL SCIENCE I

4724 - A - First Semester
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.
Units of Study:
4) Forestry
5) Hunter Safety
6) Ecology

## ENVIRONMENTAL SCIENCE II

4725-B - Second Semester

## Credit: $1 / 2$ 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.
Units of Study:
5) Wildlife
6) Water Conservation
7) Air Conservation
8) Soil Conservation

## ANIMAL SCIENCE I \& II

Grade Level: 10-12
ANIMAL SCIENCE I
4563-A - First Semester

## ANIMAL SCIENCE II

4564-B - Second Semester
(State Course Code: 18101A002)
Credit: 1 (year-long course) **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.

## Units of Study:

6. Animal Species/ Breeds
7. Nutrition
8. Animal Handling
9. Breeding
10. Vet Science

CROP SCIENCE I \& II (formerly AGRONOMY)
Grade Level: 10-12
CROP SCIENCE I
4565-A - First Semester Credit: $1 / 2$ per semester (year-long course) **Counted as a Science Credit

## CROP SCIENCE II

4566-B - Second Semester

Credit: $1 / 2$ per semester **Counted as a Science Credit
Credit: $1 / 2$ per semester ${ }^{* *}$ Counted as a Science Credit

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.

Units of Study:
12) Corn
13) Soybeans
14) Wheat
15) Cover crops
16) Weather
17) Test Plots
18) Research
19) Integrated Pest Management
20) Communication
21) Career Readiness Skills - Prep
22) SAEs

## LANDSCAPING AND TURF MANAGEMENT I \& II

Grade Level: 11-12
LANDSCAPING AND TURF MANAGEMENT I
4567-A - First Semester
LANDSCAPING AND TURF MANAGEMENT II

- B - Second Semester

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.
Units of Study:

1) Turfgrass Types
2) Turfgrass Maintenance
3) Integrated Pest Management
4) Scientific Method
5) Landscape Design - Paper \& Digital
6) Plant ID - Landscaping Plants
7) Landscape Plant Maintenance
8) Landscape Installation
9) Communication
10) Career Readiness Skills - Prep
11) SAEs

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: $1 / 2$ 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 ( $\$ 30$ 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 CO2 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: 112 per semester Weighted (Dual Credit Only) *Counted as a Science Credit
Fees: Students are responsible for BHC fees if they wish to obtain credit ( $\$ 30$ 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.
Units of Study:
11) Propagation
12) Division
16) Plant ID
17) Sales
13) Marketing
14) Greenhouse Structures
15) Heating/Cooling
18) Communication
19) Career Readiness Skills - Prep.
20) SAEs
(State Course Code: 18105A001)
VETERINARY TECHNOLOGY \& SMALL ANIMAL CARE
4742 - Non-Dual Credit - B - Second Semester
4744 - DUAL CREDIT - B - Second Semester (ONLY)
Intro to Veterinary Technology - Black Hawk Course \#VT $100 \quad 2$ BHC Credit Hours
Grade Level: 11 \& 12
Credit: $1 / 2$ (semester course) (Weighted Dual Credit Only)
**Counted as a Science Credit
Fees: Students are responsible for BHC fees if they wish to obtain credit ( $\$ 30$ 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.
Units of Study:
14. Personal Safety and Animal Handling
15. Animal Roles in Society
16. Veterinary Terminology
17. Care and Management of Species
18. Biosecurity
19. Interconnectedness of Body Systems
20. Purpose, Function, Skeletal System Parts

## ANIMAL NUTRITION

4740 - Non-Dual Credit - A - First Semester
4743 - DUAL CREDIT - A - First Semester (ONLY) Animal Nutrition - Black Hawk Course \#AG 142
Grade Level: 11 \& 12
21. Different Systems of the Body
22. Animal Reproduction and Animal Genetics
23. Pharmacology
24. Parasitology
25. Physical Exams
26. Hospital Procedures
(State Course Code: 18107A001)

3 BHC Credit Hours
Credit: $1 / 2$ (semester course) MCHS (Weighted)


#### Abstract

**Counted as a Science Credit Fees: Students are responsible for BHC fees if they wish to obtain credit (\$30 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.


Units of Study:
8. Nutritional Needs of Animals
9. Beef
10. Swine
11. Sheep/ Goats
12. Poultry
13. Equine
14. Small Pets

## INTRO TO FOOD SCIENCE <br> 4758 - Year

Grade Level: 10-11 Credit: 1 (year-long course) *Counted as Science Credit
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 inspectors, quality control technicians, food processors, and sanitation supervisors. 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. Hands-on labs are a part of this course, but the focus is on classroom work. This course serves as a prerequisite for the Applied Food Science Course. 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.

## APPLIED FOOD SCIENCE <br> 4759 - Year

Grade Level: 12
Prerequisite: Intro to Food Science

## (State Course Code: 18305A002)

Credit: 1 (year long course)

The prerequisite to this course is Introduction to Food Science. Food Manufacturing \& Management introduces students to the principles and practices of food safety, processing, and packaging to develop solutions for problems in food production, handling, and storage. Learners will examine the full range of food processing techniques. Learners will examine the process of food product development and techniques used to measure food sensory aspects, shelf life, and food stability. Learners will examine government regulation's impact on labeling, new packaging technologies, harvesting, transportation, and the environment. Food laws, regulations, and regulatory and commercial grading standards will be examined. This class will have a focus of lab based work with some in the classroom instruction as needed. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects are an integral course component for leadership development, career exploration, and reinforcement of academic concepts.

## Grade Level: 11-12 or instructor approval <br> Credit: 1 (year-long course) *Counted as Math Credit

## AGRICULTURAL CONSTRUCTION AND TECHNOLOGY I

## 4582-A - First Semester

Credit: $1 / 2$ 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: $1 / 2$ 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.
Units of Study:
10) Surveying
11) Electricity
12) Plumbing
13) Masonry
14) Carpentry
15) Drafting - Paper \& Digital
16) Communication
17) Career Readiness Skills - Prep
18) SAEs

## AGRICULTURAL BUSINESS MANAGEMENT I \& II

Grade Level: 11-12 or instructor approval Credit: 1 (year-long course)
(State Course Code: 18201A001)
**Counted as Consumer Ed Credit

## AGRICULTURAL BUSINESS MANAGEMENT I

4622-A - First Semester
Credit: $1 / 2$ 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: $1 / 2$ 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. Units of Study:

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

AG COMPUTERS AND TECHNOLOGYI\& 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: $1 / 2$ per semester

## AG COMPUTERS AND TECHNOLOGY II

## 5226 - B - Second Semester

Credit: $1 / 2$ 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.
Units of Study:

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

AGRICULTURAL MACHINERY AND POWER I \& II
Grade Level: 11-12 or instructor approval
(State Course Code: 18449A001)
**There will be an outside of class requirement of 4 times per semester for work on the current car projects.
Credit $1 / 2$ each semester at MCHS (can be year-long course) Weighted (Dual Credit only)
Credit: 3 credits first semester and 3 credits second semester for Black Hawk College
Fees: Student is responsible for BHC fees if they wish to obtain dual credit. ( $\$ 30$ 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 satisfies the Black Hawk College Classes:
Auto Mechanics 100-Vehicle Maintenance and Repair I
Auto Mechanics 101- Vehicle Maintenance and Repair II

## AGRICULTURAL MACHINERY AND POWER I

## 5662 - A - First Semester

Credit: $1 ⁄ 2$ 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 filet sizes and material thickness will be the welding lab experiences. Shop safety will be emphasized. Units 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: $1 / 2$ 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.
Units 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: 18449A001)
Grade Level: 12 and Instructor approval required
Credit $1 / 2$ each semester
**Prerequisite: C or better in Ag Machine \& Power I \& II

## ADVANCED AGRICULTURAL MACHINERY AND POWERI

## 5663-A - First Semester <br> Credit: $1 / 2$ 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: $1 ⁄ 2$ 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 $1 / 2$ 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. ( $\$ 30$ 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
Units 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

5691 - B - Second Semester Credit: $1 / 2$ per semester<br>Class available to Seniors who have successfully completed the Welding DC class. Instructor approval required.

## WORK BASED LEARNING CLASS I \& II

Grade Level: 11-12 by application only 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 WORK BASED LEARNING.

## WORK BASED LEARNING CLASS I

5696-A - First Semester
Units of Study:

1) Job Skills
2) Credit

## WORK BASED LEARNING CLASS II

5697 - B - Second Semester
Units of Study:

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

## WORK BASED LEARNING I \& II

Grade Level: 11-12 by application only
WORK BASED LEARNING I
5698-A - First Semester
WORK BASED LEARNING II
5699-B - Second Semester

Credit: $1 / 2$ per semester

Credit: $1 ⁄ 2$ 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 WORK BASED LEARNING CLASS.

# INDUSTRIAL ARTS 

## INTRODUCTION TO WOODWORKING

(State Course Code: 13052A001)

## 5402- Year

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-joining techniques. During the course, students will construct and finish several projects. Students are responsible for the cost of materials for each project.
Units 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)

## 5412 - Year

Grade Level: 10-12 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.
Units 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.
Units 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).

## Units of Study:

1. Machine Safety
2. Individual Project Work

## BUILDING TRADES <br> 5435-A - First Semester <br> 5436-B - Second Semester

Grade Level: $12 \quad$ 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.

## Units 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 of the world of business through the business courses offered below. It is recommended that every student enroll in at least one semester of Computer Concepts \& Software Applications or Information Processing I to assist students in other class assignments.

## Computer Concepts \& Software Applications

## 5012 - Year

Grade Level: 9-12 Credit: 1 (year-long 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 a variety of software applications.
Units of Study:

1. Google Apps
2. Microsoft Office
3. Desktop Publishing

4 Web Design

## INFORMATION PROCESSING I <br> 5026 - Year

Grade Level: 9-12
(State Course Code: 10005A001)
Credit: 1 (year - long 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.
Units of Study:

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

## INFORMATION PROCESSING II

5035-A - First Semester
5036-B - Second Semester
Grade Level: 10-12
Prerequisites: Information Processing I
Students will take the skills learned in Information Processing I 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.
Units 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 Algebral)

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.
Units 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: 12104A002) 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 Video Game Design. Learn the dos and don'ts of web page design by evaluating existing web pages. Video Game Design and Programming Concepts is a fun and easy text-software design guide combination that uses an activity-based integrated curriculum: game-theory reading with game-building application lessons. In addition students will use iPads to create and edit videos.

## Units 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.
Units of Study:

1. Advanced HTML
a. Tables and Columns
b. Designing a Web Form
c. Enhancing a Website with Multimedia
d. Getting Started with JavaScript
e. Working with Events and Styles
2. Video Game Design
a. Software Basics
b. Click Ball
c. Quality Assurance
d. Scene Construction
e. Iterative Design and the Scientific Method
f. Digital Art
g. Parent and Child Objects
h. Graphing Game Coordinates

## INTRODUCTION TO BUSINESS

(State Course Code:12001A001)
5010 - First or Second Semester
Grade Level: 10-12
Credit: $1 / 2$ (semester course)
Are you interested in a career in business or owning your own business? This course will provide an overview of all aspects of business marketing and management, including the concepts, functions, and skills required for meeting the challenges of operating a business in today's economy.
Unit of Study:

1. Business \& Economics
2. Leadership \& Management
3. Marketing \& Selling
4. Business Financial Management
5. Careers \& Employment

## 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: 24052A000)

6003- Year
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.
Units 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

6023 - Year
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.

## Units 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: 24054A000)
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.
Units 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.

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.
Units 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.


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
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.

## Units 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

Grade Level: 10-12 Credit: $1 / 2$ 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
(State Course Code: 05155A000)
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
(State Course Code: 05154A000)
(State Course Code: 05199A000)

## 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.
Units 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: $1 / 2$ (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.
Units 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: $1 / 2$ (semester course)

## Perquisites: 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. Units 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

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.
Units 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: 05199A001)
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
AP STUDIO ART I (2D DESIGN)
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
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

## MISCELLANEOUS

## CONSUMER EDUCATION

(State Course Code: 19262A000)

## 3650 - First or Second Semester

## Grade Level: 12

Credit: $1 / 2$ (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 lllinois (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

## DRIVER EDUCATION

(State Course Code: 08152A000)
7530-A - First Semester
7535 - B - Second Semester
Grade Level: 9-10
Credit: $1 / 2$ (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 transportations 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 $\mathbf{\$ 2 0}$ to take and when passed - received your permit) is failed the first time, you have $\mathbf{2}$ more opportunities to take the test with your driver's education instructors before paying \$20 for $\mathbf{3}$ 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. 4 BTW
CH. 5 IPDE, Zone Control
CH. 6 Emotions, Physical Senses, Temporary
Disabilities
CH. 7 Alcohol and Drugs
CH. 11 Pedestrians
CH. 12 Adverse Conditions
CH. 13 Handling Emergencies
CH. 14 City Driving
CH. 15 Rural Driving
CH. 16 Highway Driving
CH. 17 Buying and Maintaining a Vehicle


## CH. 18 Planning Your Travel

## AUDIO/VIDEO ENGINEERING \& THEATER PRODUCTION

## 7777-A - First Semester

Grade Level: 9-12
(State Course Code: 11051A000)

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: 12999A000)

## 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.

## STEP I (Secondary Experience Transitional Program) - <br> 7051- First Semester

(State Course Code:25152A000)
Grade Level: $11 \quad$ Credit: 1 (year-long course)
Prerequisites: Administrative Approval
STEP I provides a foundation for transition learning and is crucial for successful post-secondary success. Developed from years of experience and rooted in the core areas of transition as defined by the Workforce Innovation and Opportunity Act, these defined skills are what equip students with the foundational competencies needed for a successful transition to the workforce and post-secondary endeavors. Through exposure to high-quality and engaging lessons aligned around these critical building blocks, students are empowered to advocate for themselves and acquire the necessary skills for employment, training, and independent living.

Essential Skill \# 1: Students will display knowledge of the characteristics of a good work ethic and demonstrate an understanding of essential workplace skills.

Essential Skill \#2: Students will effectively demonstrate their ability to communicate orally and in written form to attain and maintain employment.

Essential Skill \#3: Students will exhibit an understanding of concepts related to employee benefits, workplace rules and documents, and procedures.

Essential Skill \#4: Students will exhibit appropriate self-advocacy skills by demonstrating knowledge of themselves and effectively advocating for their needs and rights in various settings.

Essential Skill \#5: Students will demonstrate independent living skills by acquiring knowledge and competencies related to daily living tasks to promote autonomy and a successful transition to independent living.

STEP II (Secondary Experience Transitional Program) -
(State Course Code:22152A000)
7052-Second Semester
Grade Level: $12 \quad$ Credit: 1 (year-long course)
Prerequisites: Administrative Approval
STEP II is a work experience program that helps students with disabilities prepare to transition to employment and community participation during and after high school. Students learn to become productive, self-sufficient adults through a variety of STEP experiences such as a student led business.

## CAREER EXPLORATION

(State Course Code:22151A000)
7015 - Year
Grade Level: 10
Credit: 1 (year-long course)
Prerequisites:
Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers.

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 - (PreK - 8)

(State Course Code: 19198A000)
9922, 9923, 9924, 9925 - Year (takes up two class periods)
(Pass/Fail credit, Counts towards graduation but does not count toward GPA)
Grade Level: 12
Credit: 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.

## LIBRARY AIDE

(State Course Code: 22053A000)

## 9927-Year

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

## Grade Level: 12

Credit: 1 (Pass/Fail credit, year-long course)
Library/AVC Aide Library/AVC Aide courses provide students with the opportunity to work in the library or in media and audiovisual centers. Duties may include collecting, distributing, and categorizing materials; operating audiovisual equipment; assisting students and teachers; and performing clerical duties. Students typically gain experience in library science and/or media and audiovisual technology. (Available SY 2011-.)

## ON-LINE COLLEGE CLASSES

(State Course Code: 10004A000)
9955 - First and/or Second Semester
Grade Level: 11, 12 Credit: $1 / 2$ credit per semester **Non-weighted**
** Weighted only if the class meets curriculum requirements of the general education program ** (up to the discretion of administration and counselors)
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 high school AND college credit OR earn college credit only. Students must let their counselor know at the time of registration for the class whether they would like it included on their high school transcript. Students 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.

