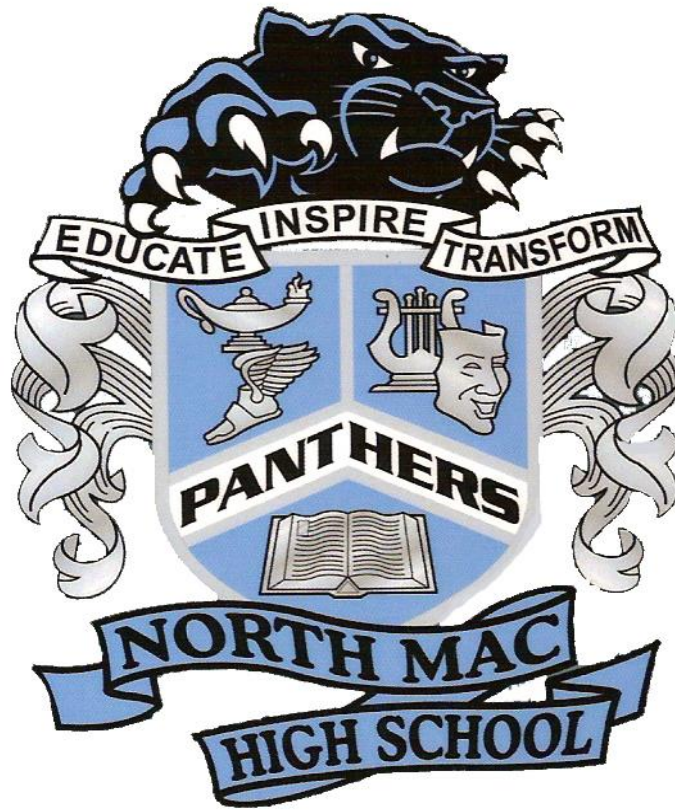


# **North Mac High School**



**Course Description Booklet**

**2023 - 2024**

# **GENERAL INSTRUCTIONS**

Course descriptions are provided for your informational purposes and to assist students and parents registering for classes at North Mac High School. Questions concerning any course, prerequisite for a course, or course sequence, can be answered by the instructor or high school counselor. Questions concerning regulations, policies, or laws governing curriculum should be directed to the administration.

Students and parents are encouraged to work together during the process of selecting classes. All students will log on to his or her online Skyward account and register for those courses at school with the high school counselor. The window for selecting classes will be open for a week after that meeting so parents can review the courses and make additions or changes. After the deadline, all changes to course request will need to go through the school counselor.

**PREREQUISITES:** Some classes have prerequisites. Prerequisites are courses or grade requirements needed before a student may register for a particular class. Such requirements are in place to prevent a student from taking a class for which he or she is not prepared and, consequently, would not have the background or experience to draw upon in order to pass the course.

## **REQUIREMENTS FOR GRADUATION**

**26 total credits in the following areas:**

- 4 credits of English:
  - 1.0 credit of College Prep English I or English I
  - 1.0 credit of College Prep English II or English II
  - 1.0 credit of College Prep English III or English III
  - 1.0 credit of College Prep English IV or English IV
- 3 credits of Math:
  - 1.0 credit of College Prep Algebra I or Algebra I
  - 1.0 credit of College Prep Geometry or Geometry
- 3 credits of Science:
  - 1.0 credit of Biology
- 3 credits of Social Studies:
  - 1.0 credit in Social Studies/Geography
  - 1.0 credit in United States History
  - .50 credit in American Government – Civics
- Semester credit of Consumer Economics/Personal Finances
- Semester credit of Health
- Semester credit of Driver's Education
- 4 credits of Physical Education (unless opting out for sports/band/academic classes)
- Electives credits to equal remaining credits needed to reach 26 total

**Additional Requirements:**

- Pass the Illinois State Constitution Exam
- Pass the Federal Constitution Exam
- SAT exam as a Junior
- File the Free Application for Federal Student Aid as a Senior (FAFSA)

# **HONORS CURRICULUM**

The objective of the honors curriculum is to promote the rigorous study of certain courses. Students in the honors courses should be willing (and will be required) to do college-prep level work. Courses included in the Honors Curriculum are:

College Prep English I	Human Anatomy / Physiology
College Prep English II	Chemistry II
College Prep English III	Microbiology
College Prep English IV	Genetics
College Prep Algebra I	Organic Chemistry
College Prep Geometry	Physics
College Prep Algebra II	Spanish III
Pre-Calculus	Spanish IV
AP Calculus	French IV
AP United States History	Honors Band

## **ADVANCED PLACEMENT PROGRAM COURSES**

The Advanced Placement Program has enabled millions of students to take college-level courses and earn college credit, advanced placement, or both, while still in high school. AP Exams are given each year in May. Students who earn a qualifying score on an AP Exam are typically eligible to receive college credit and/or placement into advanced courses in college. Every aspect of AP course and exam development is the result of collaboration between AP teachers and college faculty. They work together to develop AP courses and exams, set scoring standards, and score the exams. College faculty review every AP teacher's course syllabus. Advance Placement courses offered at North Mac High School may include:

- AP Calculus
- AP United States History

## **LINCOLN LAND COMMUNITY COLLEGE**

### **DUAL CREDIT COURSES**

The objective of a dual credit course is to provide students with a college level course during high school without the expense of the college credit. Students are required to do college-level work and will receive transferrable college credit. Dual credit courses offered at North Mac High School may include:

- Spanish III (8 credit hours)
- Spanish IV (4 credit hours)
- Horticulture Science (3 credit hours)
- Computer Applications (3 credit hours)
- CACC Programs (credits vary)

# **LINCOLN LAND COMMUNITY COLLEGE**

## **DUAL CREDIT PROGRAM**

### Goals:

- To provide educational opportunities for high school students in the Lincoln Land Community College (LLCC) district;
- To enhance the current high school curriculum;
- To address students' unique interests, abilities, and attitudes;
- To prepare students for work and/or further educational endeavors; and
- To improve the transition of students from high school to college.

### Guidelines:

- Courses are college-level courses and are of the same high quality, cover the same content, and have the same rigor as courses offered at the college's main or regional center campuses.
- Courses can be taken for college and high school credit.
- Students must enroll as LLCC students.
- Students will be subject to all LLCC placement, enrollment, grading, records, policies, and procedures.
- All instructors of dual credit courses must meet Illinois Community College Board (ICCB) and LLCC qualifications.
- Dual credit courses use LLCC textbooks and outlines (unless otherwise approved by an LLCC Dean).
- Students must meet all LLCC placement policies. Students enrolling in a composition course must have an SAT score of 480 or better in the writing/reading section or an ACT score of 18 or better in English. Students enrolling in a math course must have an SAT score of 530 or better in the math section or an ACT score of 22 or better in math.
- ACT Math or English composite score of 22 or higher, or students must achieve the appropriate LLCC placement score.
- Students who withdraw and receive (W) from their dual credit classes, should be aware there may be a negative impact on future financial aid.
- All dual credit courses are offered under the approval and supervision of Lincoln Land Community College. At times, changes may be made or courses discontinued based on the needs or recommendation of the college or the various departments.

# **SCHEDULE CHANGE POLICY**

Students are encouraged to complete their schedule selection by the designated deadline to ensure they can get into the classes they select. This process takes place in early spring to create the schedules for the next school year. Students and parents are advised to refer to the Course Description Booklet when making course selections to view the course descriptions, pre-requisites, and recommendations.

Students may make course selection changes prior to the first day of school. **No schedule changes will be made once school begins.** Exceptions will be made ONLY for the following reasons:

1. Received academic credit for a summer school course.
2. Not meeting a prerequisite course prerequisite course requirement.
3. Master schedule conflict. For example, two study halls in one semester or two of the same class in the same semester; missing a class period; missing a lunch period.
4. Courses needed to meet graduation requirements.
5. Balancing out classes may continue after school begins due to students moving in or out of the district which may result in a schedule change or class period change.

Changes for second semester will be allowed the first part of December. Students may request **ONE** schedule change, with parent approval, for second semester under the following parameters:

1. Students may replace a yearlong class with a semester long class if the first semester was not completed successfully because the course material was beyond the scope of the student's ability.
2. Students currently enrolled in a study hall may enroll in a second semester class if there is availability.
3. Students may drop a second semester elective for a study hall.

Schedule changes will **NOT** be made for the following reasons (this will strongly be enforced):

1. Teacher preference
2. Lunchtime preference
3. Study Hall requested during a particular period

# **RECOMMENDED FOUR YEAR PLAN**

Below is a suggested four year plan for North Mac students. This plan will prepare students for college, trade school, military, or the workforce after successful completion of high school.

## **FRESHMAN YEAR**

1. English I / CP English I
2. Algebra I / CP Algebra I or  
Geometry / CP Geometry
3. Biology I
4. Social Studies
5. Drivers Ed / Leader in Me / Health
6. PE
7. Elective
8. Elective

## **JUNIOR YEAR**

1. English III / CP English III
2. Algebra II / CP Algebra II or  
Pre-Calculus
3. Chemistry I / Physics / Micro / Genetics
4. US History / AP US History
5. PE
6. Elective
7. Elective
8. Elective

CACC is also an option for Juniors and Seniors and allows students to earn 3 credits.

## **SOPHOMORE YEAR**

1. English II / CP English II
2. Geometry / CP Geometry or  
Algebra II / CP Algebra II
3. Earth Science / Chemistry I
4. Social Studies (if not taken as freshmen)
5. PE
6. Elective
7. Elective
8. Elective

## **SENIOR YEAR**

1. English IV / CP English IV
2. Math (highly recommended for college)
3. Science (highly recommended for college)
4. American Government-Civics /  
Consumer Economics/Personal Finances
5. PE
6. Elective
7. Elective
8. Elective

CACC is also an option for Juniors and Seniors and allows students to earn 3 credits.

# **AGRICULTURE DEPARTMENT**

## **Agriculture Business (18201A001)**

**Grade: 11, 12**

### **Prerequisite: Introduction to Agriculture**

**Credit: ½ per semester**

This course will provide students with the basic knowledge and skills necessary to manage personal finances and develop into a successful entrepreneur and/or businessperson. Instructional units include: business ownership types, starting an agribusiness, managing and operating an agribusiness, financing an agribusiness, managing personal finances, record keeping and financial management of an agribusiness, local, state, and federal taxes, agricultural law, and developing employability skills. Student skills will be enhanced in math, reading comprehension, and writing through agribusiness applications. 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.

## **Animal Science (18101A002)**

**Grade: 10, 11, 12**

### **Prerequisite: Introduction to Agriculture**

**Credit: 1 per year**

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.

## **Floral Design & Marketing (18056A001)**

**Grade: 11, 12**

### **Prerequisite: Introduction to Agriculture**

**Credit: ½ per semester**

Floral Design and Marketing covers principles of floral art with an emphasis on commercial design. Topics include basic design styles and color harmonies; identification, use, and care of processing of cut flowers and foliage; mechanical aids and containers; personal flowers; holiday designs; and plant identification and care. The student will demonstrate the ability to identify floral design styles and color harmonies; identify cut flowers and foliage and the care and processing methods for extended vase life; select containers and mechanical aids; and create basic floral arrangements. The study of the general principles of plants, and their life processes and morphology, with emphasis on major floral crops are also covered. Students will also learn about marketing strategies and floral shop setup. Students will develop a bill of materials and look at other key factors in running a floral shop like overhead cost. 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.

## **Horticulture Science (18051A001)**

**Grade: 11, 12**

### **Prerequisite: Introduction to Agriculture**

**Credit: 1 per year**

This course offers instruction in both the greenhouse production and landscape areas of horticulture. Units of study include plant identification, greenhouse management, growing greenhouse crops, landscape design, installation, and maintenance, horticulture mechanics, nursery management, and turf production. Agribusiness units will cover operating a horticultural business, pricing work, 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.

**Introduction to the Agriculture Industry (18001A001)****Grade: 9, 10, 11, 12****Prerequisite: None****Credit: 1 per year**

This course provides an opportunity for students to learn how the agricultural industry is organized; its major components; the economic influence of agriculture at state, national and international levels; and the scope and types of job opportunities in the agricultural field. Basic concepts in animal science, plant science, soil science, horticulture, natural resources, agribusiness management, and agricultural mechanics, will be presented. Students will learn about FFA history, structure, parliamentary procedure, leadership skills and public speaking. 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.



# **BUSINESS AND TECHNOLOGY DEPARTMENT**

## **Advertisement & Document Design (11152A001)**

**Grade: 9, 10, 11, 12**

**Prerequisite: Counselor Recommendation**

**Credit: 1 per year**

Advertisement and Document Design integrates the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

## **Business Law (12054A001)**

**Grade: 10, 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

Introduces law and the origins and necessity of the legal system; provides insight into the evolution and development of laws that govern business in our society; develops an understanding of how organization and operation of the legal system impact business; develops an understanding of rights and duties within the business environment; and includes contractual responsibility, protection of individual rights in legal relationships relative to warranties, product liability, secured and unsecured debts, negotiable instruments, agencies, employer-employee relations, property ownership and transfer, landlord and tenant, wills and estates, community property, social security, and taxation.

## **Business Technology and Concepts (12002A001)**

**Grade: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

This orientation-level 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 a global economy. Topics covered will include the various forms of business ownership, including entrepreneurship, as well as the basic functional areas of business (finance, management, marketing, administration and production). Students will be introduced to a wide range of careers in fields such as accounting, financial services, information technology, marketing, and management. Emphasis will be placed on using the computer while studying applications in these careers along with communication skills (thinking, listening, composing, revising, editing, and speaking), math and problem solving. Business ethics as well as other workplace skills will be taught and integrated within this course. This course is not intended to meet the consumer education requirement, but rather to provide preparation for the skill level courses that make up the Business, Marketing and Management occupations programs.

## **Computer Applications (CSC 105 – Dual Credit) (10004A001)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

Computer Applications is an orientation-level course designed to develop awareness and understanding of application software and equipment used by employees to perform tasks in business, marketing and management. Students will apply problem-solving skills to hands-on, real-life situations using a variety of software applications, such as word processing, spreadsheets, database management, presentation software, and desktop publishing. Students will explore topics related to computer concepts, operating systems, telecommunications and emerging technologies. The development of employability skills, as well as transition skills, will be included in the course as well as an understanding of the ethical considerations that arise in using information processing equipment and gaining access to available databases.

*Computer Applications is a transferable dual credit course which will fulfill the General Education technology course requirement in most Illinois colleges.*

**Computer Programming (10152A000)****Grade: 11, 12****Prerequisite: None****Credit: ½ per semester**

Computer Programming provides students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and C#, may be used instead. Students learn to structure, create, document, and debug computer programs. Advanced courses may include instruction in object-oriented programming to help students develop applications for Windows, database, multimedia, games, mobile and/or Web environments. An emphasis is placed on design, style, clarity, and efficiency. In these courses, students apply the skills they learn to relevant authentic applications.

**Consumer Economics/Personal Finance (19262A001)****Grade: 11, 12****Prerequisite: None****Credit: ½ per semester**

Consumer Economics/Personal Finance provides students with an understanding of the concepts and principles involved in managing one's personal finances. These courses emphasize lifespan goal-setting, individual and family decision-making, and consumer rights as well as topics that are commonly associated with personal finance so that one can become a financially responsible consumer. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also investigate the effects of the global economy on consumers and the family.

**Sports and Entertainment Marketing (12163A001)****Grade: 10, 11, 12****Prerequisite: None****Credit: ½ per semester**

Sports and Entertainment Marketing provides students with a thorough understanding of fundamental marketing and management concepts and theories as they relate to the sports and entertainment industries. Content may address promotion of sports/events, licensing, sponsorship and endorsements, branding, marketing research, product development, pricing and distribution strategies, sales, event planning, and the role of existing and emerging technologies. These courses may also encourage students to develop job skills and explore career options.

**Video Production (10203A001)****Grade: 11, 12****Prerequisite: None****Credit: ½ per semester**

This course introduces students to the creation and manipulation of digital videos using the video editing software program called Adobe Premiere Elements 13.0. Sophisticated and professional video presentations will be developed throughout the semester. The course is designed to provide hands-on experience in editing and filming. By the end of the semester, students will be familiar with video editing and will be able to create short videos utilizing basic capture and editing techniques. Students will experience real world work conditions such as meeting deadlines and working cooperatively in teams to prepare, record, and present video projects. Students will also be required to film various school events as well as film outside of school.

**Web Page Design (10201A001)****Grade: 9, 10, 11, 12****Prerequisite: None****Credit: 1 per year**

Web Page Design teaches students how to design websites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, Document Object Model, and Cascading Style Sheets—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

# **CAPITAL AREA CAREER CENTER (CACC)**

**Capital Area Career Center (CACC)**

**Grade: 11, 12**

**Prerequisite: Application, acceptance and on-track for graduation**

**Credit: 3 per year**

**Acceptance Criteria: Good Attendance, Positive Discipline Record, Demonstrated**

**Commitment to Career Studies, High Level of Personal and Academic Responsibility**

Capital Area Career Center gives students the opportunity to pursue career options, enhance employability skills, transition into employment, and prepare for lifelong learning. College credit is available in many of the programs. Students interested in attending must complete an application during registration sophomore year. All course descriptions on pages 12-19 were provided by CACC.

## **Career Programs**

**Audio/Video Production I**

**Prerequisite: None**

**Dual Credit: No**

**Certification: None**

This course is designed to provide students with the skills needed for a career in the technical aspects of radio and television broadcasting. Instruction includes camera operations, basic audio and video editing, sound and lighting techniques, and sound mixing. Students learn the operation, maintenance, and repair of video and DVD recording equipment, video/digital cameras, microphones, computers, lighting/grip equipment, and other production equipment used in the video and audio production of television programs. Students also learn to use, maintain, and repair various types of audio recorders, amplifiers, transmitters, receivers, microphones, and sound mixers to record and broadcast radio programs.

**Audio/Video Production II**

**Prerequisite: Completion of Audio/Video Production I**

**Dual Credit: No**

**Certification: None**

This course is for students who have completed Audio/Video Production I. In addition to expanding on the activities explored in the first course, students work in a team-based environment to create a variety of video and audio related broadcasts. Instruction includes single and multi-camera operations, linear and nonlinear video editing, production and post-production processes, animation graphics, sound mixing, multi-track production, audio editing, and special effects. Students learn how to use digital editing equipment and software to electronically cut and paste video and sound segments together, as well as how to regulate and monitor signal strength, volume, sound quality, brightness, and clarity of outgoing signals. This course also provides students with an understanding of the FCC and other governmental agencies' regulations related to radio and television broadcasting.

**Automotive Technology and Servicing I**

**Prerequisite: None**

**Dual Credit: Yes**

**Certification: ASE**

This course introduces students to the basic skills needed to inspect, maintain, and repair automobiles and light trucks that run on gasoline, electricity, or alternative fuels. Instructional units include engine performance, automotive electrical system, integrated computer systems, lubrication, exhaust and emission control, steering and suspension, fuel systems, cooling system, braking, and power train.

**Automotive Technology and Servicing II**

**Prerequisite: Completion of Automotive Technology & Servicing I**

**Dual Credit: Yes**

**Certification: ASE**

This course is a continuation of and builds on the skills and concepts introduced in Automotive Technician I. This course includes instructional units in alternative fuel systems, computerized diagnostics, new vehicle servicing, automotive heating and air conditioning, transmissions, testing and diagnostics, drive train and overall automobile performance.

**Building Trades I****Prerequisite:**

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.

**Dual Credit: Yes****Certification: None****Building Trades II****Prerequisite: Completion of Building Trades I**

This course provides learning experiences related to the erection, installation, maintenance, and repair of building structures and related utilities. Student technical skill experiences include instruction and activities in safety principles and practices, performing maintenance control functions, joining pipes, building water distribution lines and drains, installing and maintaining plumbing fixtures and systems, installing switch and outlet boxes, light fixtures, service entrances, roughing in and trimming out electrical devices and appliances, preparing foundations and footings, constructing residential chimneys and fireplaces, laying, jointing and pointing brick, and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job-entry skills and knowledge.

**Dual Credit: Yes****Certification: OHSA****Cosmetology I****Prerequisite: None**

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology I provides introduces students to the requirements to become a licensed cosmetologist. It offers students instruction in both theory and practical application in the following areas: tools and their use, shampoo, understanding chemicals and use, types of hair, sanitation, hygiene, skin diseases and conditions, anatomy and physiology, electricity, ethics, nail technology and esthetics as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act. Knowledge, skills, and activities completed in this course will help prepare students for Cosmetology II while earning hours towards licensure.

**Dual Credit: No****Certification: Hours  
Needed****Cosmetology II****Prerequisite: Completion of Cosmetology I**

The Cosmetology program must be approved and licensed by the Illinois Department of Financial and Professional Regulations, Division of Professional Regulation and meet all state and federal regulations. Cosmetology II will build upon the knowledge and skills attained in Cosmetology I and will provide instruction, which may be a combination of classroom instruction and hands-on experience in the following areas: practical chemical application/hair treatment, hair styling/hairstyling, and shop management, sanitation and interpersonal relations as they relate to the Barber, Cosmetology, Esthetics, and Nail Technology Act, as well as labor and compensation laws. Instruction may also include instruction in nail technology, esthetics, individualized skill development, and career planning. This course offers a curriculum of advanced theoretical and practical skill development to prepare students for the cosmetology licensure examination and progression to obtain the 1500 hours of study in cosmetology.

**Dual Credit: No****Certification: Hours  
Needed**

**Culinary Arts I**  
**Prerequisite: None**

**Dual Credit: No**  
**Certification: ServSafe**  
**Food Handlers**

This course provides terminology, culinary math, and practical experiences needed for the development of culinary competencies and workplace skills. Safety and sanitation instruction and classroom application will prepare students for an industry-recognized sanitation exam. Classroom experiences will develop skills to work in the front of the house, back of the house, and work stations. Additional content may include: event planning, customer service and relations, food service styles, baking and pastry arts, hors d'oeuvres, and breakfast cookery. Students will be provided opportunity training experiences on commercial equipment.

**Culinary Arts II**  
**Prerequisite: Completion of Culinary Arts I**

**Dual Credit: Pending**  
**Certification: ServSafe**  
**Food Handlers**

Culinary Occupations II places special emphasis for students to develop operational management skills -including design and organization of food service systems in a variety of settings, human relations, and personnel training and supervision. Additional topics include: food cost accounting; taking inventory; advertising; monitoring consumer and industry trends; and individualized mastery of culinary techniques. Training experiences involve equipment and facilities simulating those found in business and industry.

**Early Childhood I**  
**Prerequisite: None**

**Dual Credit: No**  
**Certification: CPR, ECE**

This course prepares students to guide the development of young children in an educational setting through classroom and job shadowing experiences. Course content includes child development, care, and education issues. Project-based learning experiences include planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements of teaching young children. Students will research the requirements of early childhood education careers and develop/expand their career portfolio.

**Early Childhood II**  
**Prerequisite: Completion of Early Childhood I**

**Dual Credit: No**  
**Certification: CPR**

This course prepares students to guide the development of young children in an educational setting through classroom and job shadowing experiences. Course content includes child development, care, and education issues. Project-based learning experiences include planning and implementing developmentally appropriate activities, basic health and safety practices, and legal requirements of teaching young children. Students will research the requirements of early childhood education careers and develop/expand their career portfolio.

**Electronics and Engineering I**  
**Prerequisite: None**

**Dual Credit: No**  
**Certification: Amatrol**

This course introduces students to the skills needed to service, repair, and replace a wide range of equipment associated with automated or instrument controlled manufacturing processes. Planned learning activities in this course allow students to become more knowledgeable in the fundamental principles and theories of electrical/electronic and hydraulic/pneumatic equipment as applied to instrumentation devices and digitally encoded radio equipment. Instruction also includes safety principles and practices, semi-conductors and transistor theory, electrical parameters and circuits,

electronic component function and identification, and the use and care of related hand tools, power tools, and test equipment.

### **Electronics and Engineering II**

**Prerequisite: Completion of Electronic and Engineering I**

This course provides planned learning activities designed to allow students to gain knowledge and skills in testing, maintaining, and repairing electronic equipment and systems used in the manufacturing industry. Learning activities in this course emphasizes the development of more advanced knowledge and skills than those provided in Industrial Electronics I. Skills introduced in this course include instruction in the interpretation of technical sketches, schematics, and circuit diagrams. Additional units of instruction include the identification and causes of equipment malfunctions, the repair and replacement of parts and equipment, the care and use of standard tools, equipment, and specialized instrumentation testing devices.

**Dual Credit: No**

**Certification: None**

### **Emergency Medical Technician**

**Prerequisite: Seniors Only**

Emergency Medical Technology courses place a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses should also cover the legal and ethical responsibilities involved in dealing with medical emergencies. The Illinois Department of Public Health approves EMT training programs in the State of Illinois. Approved programs must meet or exceed the National Emergency Medical Services Education Standards for the Emergency Medical Technician and meet all other applicable requirements contained in 77 Illinois Administrative Code Part 515. To become licensed as an EMT-B in the State of Illinois or nationally certified, the student must be 18 years of age, complete a state-approved EMT program, have a current CPR-BLS for "Healthcare Provider" or equivalent credential, and pass the National Registry of Emergency Medical Technicians examination (required for national certification) or the Illinois Department of Public Health's EMT-B examination. NOTE: Must pass a 10-panel drug test.

**Dual Credit: Pending**

**Certification: CPR,  
EMT- B**

### **Fire Science**

**Prerequisite: None**

This course is designed to provide students with the skills needed to prevent and extinguish fires, maintain and repair fire service related equipment, provide basic emergency medical treatment, and prepare public service information concerning fires and hazardous materials. Instruction includes the physical characteristics of fire as well as general safety practices, basic fire behavior, and extinguishing principles. Students learn rescue and extrication procedures, types and use of ground ladders, proper ventilation techniques, and appropriate use of various water supply systems, and how to use ropes and tie knots. Students also learn basic emergency medical techniques and practices which include medical-legal considerations, terminology, airway management, patient assessment and transportation, and emergency treatment.

**Dual Credit: Yes**

**Certification: No**

### **Graphic Arts I**

**Prerequisite: None**

Graphic Arts I provides learning experiences common to all graphic communications occupations. Instruction should include use of color, balance and proportion in design; three-dimensional visualization; sketching; design procedures; layout; selection of type styles; selection of appropriate drawing tools and media; and the use of the computer as a communication tool. Planned learning

**Dual Credit: No**

**Certification: None**

activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to the graphic arts industry.

## **Graphic Arts II**

### **Prerequisite: Completion of Graphic Arts I**

Graphic Art II provides learning experiences related to the tools, materials, processes and practices utilized in the printing industry. Instruction is provided in industrial safety; stencil preparation and duplicating equipment operation; print screen preparation and printing; machine typesetting; ink and color preparation; assembly, binding, and trimming operations; layout, digital paste up and copy preparation. In addition, the course provides the student with learning experiences in the use of cameras and photographic equipment, development and processing of photographic negatives and prints, negative stripping and related platemaking procedures, photo composition, photoengraving, lithography, and offset presswork. Use of the computer in graphic arts occupations should be emphasized.

**Dual Credit: No**

**Certification: None**

## **HVAC and Electrical System Technology I**

### **Prerequisite: None**

This course is an introduction to the principles and practices employed in the installation, maintenance, and repair of basic air conditioning, heating systems, and basic electrical systems. Instruction is provided in safety precautions related to electricity, heating units, rotating machinery, refrigerants, and the use of power tools. Instruction includes basic electrical concepts, circuits, transformers, motors and motor controls, and circuit protection devices. Emphasis is also placed on basic refrigeration principles, gas laws, pressure, fluidics, heat and heat transfer, refrigerants, compressors, lubrication systems, electrical theory and circuit design and operation. Activities include experiences in using hand tools, gauges, and test instruments used in both the HVAC and electrical field. Other activities included reaming, flaring, swaging, bending, soldering, and brazing copper tubing; evacuating and charging refrigeration systems, and inspecting and testing electrical and air conditioning circuits and component parts. Employment readiness heat pump operation, installation and service certification, and employment readiness gas heating certification.

**Dual Credit: Yes**

**Certification: EPA 608**

## **HVAC and Electrical System Technology II**

### **Prerequisite: Completion of HVAC & Electrical System Technology I**

This course builds on the foundational skills introduced in HVAC and Electrical System Technology I. Students learn the mechanics and electrical fundamentals needed to work as a HVACR technician and/or electrician. Installation, maintenance, and repair of residential forced air heating systems, alternative energy sources, hydronic heating systems, heat pumps, and air conditioners are taught. The course will also cover advancing basic theory, multi-phase electricity, transmission and delivery systems, electronic and advanced motor controls, alarm and sensory systems, light commercial and industrial wiring, and advanced circuit design. Students continue to gain practical skills by working on trainers, mock-ups, and on-the-job projects.

**Dual Credit: No**

**Certification: EPA 608,  
OHSA**

## **IT Networking and Cybersecurity I**

### **Prerequisite: None**

This course provides an overview of current technology concepts and trends. It explores more fully computer security topics and the basic network, with a focus on understanding the most common threat types and implementing basic protection systems for device, data, and network protection. Professional ethics in the computer field will also be examined. Units of instruction will include; the key components of a computer network along with their main functions, the main security threats on today's technology, the different types of cybersecurity challenges that professionals are facing. Students will also learn best practices for a successful career in the field.

**Dual Credit: Yes**

**Certification: CompTIA**

## **IT Networking and Cybersecurity II**

**Prerequisite: Completion of IT Networking & Cybersecurity I**

IT Networking and Cybersecurity II is a skill-level course for students that have completed IT Networking and Cybersecurity I. Students will continue to build on the skills and concepts introduced in the first year. The course drives deeper into computer security topics and networks, with a focus on understanding the most common threat types and implementing basic protection systems for device, data, and network protection. Professional ethics in the computer field will also be examined. Units of instruction will include; the key components of a computer network along with their main functions, the main security threats on today's technology, the different types of cybersecurity challenges that professionals are facing. Students will also learn best practices for a successful career in the field.

**Dual Credit: Yes**

**Certification: GSEC**

## **IT Operations and Programming I**

**Prerequisite: None**

Computer Operations and Programming I is the first of two skill-level courses designed to develop computer programming and program design skills through the use of various programming languages such as Python, C#, Java, and other object-oriented languages. Students will be exposed to the fundamentals of system analysis and design (e.g. flowcharting, diagramming, system design and planning), and the systems development life cycle. Instruction will include basic programming tools that are common to many programming languages. These may include items such as input/output statements, constants, assignment statements, string and numeric variable types, conditional processing, and branching and looping control structures. Students will learn programming techniques such as counting, averaging, rounding, and generation of random numbers to develop a good programming technique. Students will apply what they learn to create programs and applications that solve real world business related problems. Students will create programs to store, locate and retrieve data.

**Dual Credit: Pending**

**Certification: Python**

**Entry-Level Programmer**

## **IT Operations and Programming II**

**Prerequisite: Completion of IT Operations and Programming I**

Computer Operations and Programming II is a skill-level course for students who have completed Computer Operations and Programming I. Students will use procedural and object-oriented programming languages such as Python, C# and Java. Students will learn programming concepts such as inheritance and polymorphism, advanced data handling (pointers, arrays, strings, and files), and common algorithms (recursion, searching and sorting). Students will be able to write, compile, run, test, debug and modify programs and applications that solve real world problems. Problem examples may include tracking inventory, scheduling rooms and facilities, accessing information and performing calculations.

**Dual Credit: Pending**

**Certification: Python**

**Associate Programmer**

## **Law Enforcement I**

**Prerequisite: None**

This course is designed to prepare students to enter the fields of law enforcement and the criminal justice system. Instruction includes the history of law enforcement and the legal system, report writing and recordkeeping, criminal investigation techniques, and routine police procedures. Students learn how to use communications and dispatch equipment, perform proper search and seizure techniques, conduct basic criminal investigations, and execute correct pursuit and arrest procedures. Instruction also includes patrolling techniques, private security operations, traffic investigations, and community relations.

**Dual Credit: No**

**Certification: None**



**Law Enforcement II****Prerequisite: Completion of Law Enforcement I**

This course provides experiences for students in basic investigative techniques for crimes against people and property. Learning activities emphasize the development of more advanced knowledge and skill than those provided in Law Enforcement I. Units of instruction include how to conduct a preliminary investigation and protect a crime scene, collect and preserve physical evidence including dusting latent prints, casting, fingerprint classification, and the use of portable crime laboratory equipment. Students learn how to conduct interviews, complete police reports, use police equipment, and testify in court. Instruction also includes traffic control, personal security, and law enforcement administration.

**Dual Credit: No****Certification: None****Medical Assistant****Prerequisite: None**

Medical/Clerical Assisting course provides student development in a sequence of organized learning experiences and skills designed knowledge and skills that combine the medical and clerical fields. Students typically develop skills such as patient exam preparation, assessment of vital signs, routine lab procedures, medical transcription, financial accounting, patient and insurance company billing, and record -keeping. This course suggest common clerical duties which include answering phones; greeting patients/clients; handling mail, patient/client data files, and medical histories; ordering supplies; dealing with representatives from pharmaceutical companies and medical suppliers; and performing common clinical duties which include sterilizing instruments; preparing patients /clients for examination or treatment; taking temperatures, pulse, respiration, and blood pressure; measuring height and weight; performing routine laboratory procedures; and assisting the physician with patient/client examinations and treatment under the direction of the professional medical staff. In addition, the medical assistant should be able to understand the health problems of patients/clients, ethics and legal issues, human relationships, and interpersonal relationships.

**Dual Credit: No****Certification: CPR,****Certified Clinical Medical Assistant****Nursing Assistant****Prerequisite: None**

The course is composed of a combination of subject matter and experiences designed to perform tasks of individuals receiving nursing services. The student learns those competencies needed to perform as a nurse assistant under the direction of the registered nurse. The units of instruction should include the role of the nurse assistant while covering general health care topics; medical terminology; patients /clients and their environment; special feeding techniques; psychological support and, in long-term and terminal illness, death and dying (e.g., chronically ill, children, new mothers, and so on); and all other basic nursing skills. Topics covered typically include normal growth and development; feeding, transporting patients, hygiene, and disease prevention; basic pharmacology; first aid and CPR; observing and reporting; care of equipment and supplies; doctor, nurse, and patient relationships and roles; procedure and policies; medical and professional ethics; and care of various kinds of patients. In order to have an approved nurse assistant program (one in which the students are eligible to sit for the certifying exam), the program must be approved by the Illinois Department of Public Health and meet all applicable requirements contained in 77 Illinois Administrative Code Part 395. Note: Must have flu shot to attend clinicals.

**Dual Credit: NO****Certification: CPA, CNA****Photography I****Prerequisite: None**

This course provides students with experiences related to the photography field including conventional and digital cameras. Planned experiences give students a clear and concise introduction in the following areas: safety and proper housekeeping of the photo studio, photography of visual and communicative discipline, constructing a usable cardboard camera and develop printing, learning

**Dual Credit: No****Certification: None**

basic terms, understanding how film /paperwork, proper exposure, working in the darkroom and knowing all necessary darkroom activities, safe use of photo chemicals, using dyes, and mounting and matting a completed photographic image. In addition, students are introduced to photographic terms, using light meters to measure natural and artificial lighting, using various lighting sources, manipulating basic backgrounds with different light sources, conducting shop operations, performing camera work, processing film and performing darkroom work on black and white and color film, printing photographic images, purchasing equipment and supplies, and the selection and use of cameras, film, lenses, accessories, tripods and filters.

## **Photography II**

### **Prerequisite: Completion of Photography I**

This course provides learning experiences related to the tools, materials, processes and practices utilized in the photography industry including conventional and digital cameras. Instruction includes arranging photography sessions, selecting and using cameras, film, lenses, and accessories, calculating and setting shutter speed, preparing darkroom equipment, mixing chemicals, processing film both black and white and color, printing photographic images such as enlargements, sandwich negatives, and copying slides. In addition, Commercial Photography II provides students with a better understanding of photographic images and their application in design. Students shoot photographs specifically for design layouts and in the process develop a better visual language, enhancing photo selection and editing skills. Students learn to visualize not only the look of the design, but also the structure and form of the photographs they shoot.

**Dual Credit: No**

**Certification: None**

## **Welding I**

### **Prerequisite: None**

This course assists students in gaining knowledge and developing the basic skills needed to be successful in the welding industry. Units of instruction include stick, MIG and TIG welding, basic metallurgy, cutting metal using manual processes, plasma arc cutting, and oxy-acetylene cutting processes. Students in this class focus primarily on T-joints and lap welds in all positions. In addition, students learn the basics of blueprint reading, hand tools, precision measuring, layout, and basic shop operations.

**Dual Credit: Yes**

**Certification: None**

## **Welding II**

### **Prerequisite: Completion of Welding I**

This course builds on the skills and concepts introduced in Welding Technology 1 and provides more in-depth skill development in various types of welding. Students will focus primarily on beveling, fit-up, and welding of groove welds in all positions using stick, TIG, and MIG welding processes. An introduction to spray transfer MIG, TIG aluminum, flux-core welding, open root processes, and the basics of pipe welding will be covered. Welding 2 students will be introduced to repair welding as well as basic fabrication techniques. Shop math will be covered more in-depth and will cover area, volume, material weight, and the use of the Pythagorean theory.

**Dual Credit: Yes**

**Certification: OSHA**

# **ENGLISH DEPARTMENT**

## **College Prep English I (Honors) (01001A000)**

**Grade: 9**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Students will experience a challenging academic environment that expands their reading, writing and communication skills through various effective strategies including classroom discussion and debate, collaborative group work, and writing to learn. Students will encounter various genres of literature and several styles of writing, with a *specific* emphasis placed on nonfiction texts as well as evidence based writing. Students will be expected to integrate technology into several project based learning assignments. These projects and the course as a whole will allow students to showcase their communication and critical thinking skills. Honor students will read independent novels in addition to the text taught in the classroom. They will achieve a high level of proficiency in academic writing, grammar, and vocabulary. Formal rhetoric and argument will be covered with a required research project, including cited sources and MLA format. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course. **Any student receiving below a “C” average at semester will be evaluated to determine whether the student should continue in College Prep English I or be transferred to English I.**

## **English I (01101A000)**

**Grade: 9**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Students will master formal literacy study by analyzing and interpreting reading selections to include the following non-fiction and fiction genres: short story, poetry, drama, novels, biography/autobiography, essays and speeches. Students will be provided with the opportunity to expand their knowledge of active reading strategies, the writing process, research skills, use of technology, listening, viewing and speaking skills. Students will connect course material and assignments to their own lives while demonstrating proficiency in the writing process through the production of narrative, expository and persuasive essays, and persuasive literary analysis. Formal rhetoric and argument will be introduced with a required research project, including cited sources and MLA format. Vocabulary and grammar instruction will be incorporated as needed. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course.

## **College Prep English II (Honors) (01101A000)**

**Grade: 10**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Student will experience a composition-focused class supported by intense literary student (both fiction and non-fiction). Students will be expected to integrate technology into projects and/or presentations. Honor students will read independent novels in addition to the text taught in the classroom. The study of formal rhetoric and argument will expand with a significant research project, including cited sources and MLA format. Various modes of composition for both the academic and workplace environments will be introduced and studied, and there will be a continued focus on correct grammatical usage, the formal writing process, and vocabulary knowledge. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course. As an advanced course, the length of writings and readings will be more demanding, and the text complexity of the literature will prove more rigorous. **Any student receiving below a “C” average at semester will be evaluated to determine whether the student should continue in College Prep English II or be transferred to English II.**

**English II (01002A000)****Grade: 10****Prerequisite: iReady Scores & Teacher Recommendation****Credit: 1 per year**

In English II, students will continue to apply the literary skills they have acquired as the works (both fiction and non-fiction) they read increase in difficulty. Development of writing skills in the narrative, persuasive, and expository genres will continue with increasing emphasis on the skills of developing an evidenced-based argument. Research skills and the research process will be reviewed and students will be required to produce a major research paper including cited sources and MLA format. Rhetorical analysis skills will continue to be stressed. Vocabulary will continue to be stressed to add to their already developing repertoire. Grammar will be incorporated as needed. The communication process and presentation skills, including proficiency with technology integration, will also be included in this course of study. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course.

**College Prep English III (Honors) (01054A000)****Grade: 11****Prerequisite: iReady Scores & Teacher Recommendation****Credit: 1 per year**

This course presents an intense study of American literature from its infancy until contemporary times. Fiction, non-fiction, poetry, and drama selections written by significant American authors are studied. Students will pursue a concentrated study of the basic forms of writing in addition to producing a major research paper. Rhetorical analysis will be intensified in this course. Students will be expected to read independent novels in addition to the text taught in the classroom. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course. Other skills this class will promote are college level vocabulary and writing style, listening and speaking skills, and integration of technology into projects and presentations. **Any student receiving below a "C" average at semester will be evaluated to determine whether the student should continue in College Prep English III or be transferred to English III.**

**English III (01003A000)****Grade: 11****Prerequisite: iReady Scores & Teacher Recommendation****Credit: 1 per year**

In this course students will read and analyze various American fiction and non-fiction including the following genres: short story, poetry, drama, novels, biography/autobiography, essays and speeches. Students will also become familiar with the characteristics of 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup> century American literature. Student writing will be based upon literary analyses. Rhetorical study will continue. Reading, critical thinking, vocabulary, grammar, and composition will be emphasized throughout the year. A major research project utilizing the MLA format will be conducted. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course.

**College Prep English IV (Honors) (01056A000)****Grade: 12****Prerequisite: iReady Scores & Teacher Recommendation****Credit: 1 per year**

This course introduces students to academic writing as a process of developing and supporting a thesis in an organized essay. Course topics include methods of invention, development, and organization; the elements of style, including the conventions of standard written English; and an introduction to research and documentation. Students write expository and argumentative essays based on analytical reading and critical thinking. Students write essays that demonstrate their ability to analyze and evaluate the ideas of others and integrate them into their own writing. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course. The course reinforces student experience with the conventions of standard written English. **Any student receiving below a "C"**

average at semester will be evaluated to determine whether the student should continue in College Prep English IV or be transferred to English IV.

**English IV (01004A000)**

**Grade: 12**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

In this year-long course, students will study a variety of literature, including prose, poetry, and drama, (both fiction and non-fiction). Students will write a variety of essays based on critical analysis of their reading. Research skills will be honed as students conduct research and produce a major research paper. Students will learn computer literacy skills related to the use of computers and related technology pertaining to word processing and electronic communications within this course. Rhetorical strategies will be refined, and grammar and vocabulary will continue to be emphasized.

**Classical Mythology (01069A000)**

**Grades: 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

Classical Mythology introduces students to the origins and meaning of myths, including how cultures use myths to explain natural or social phenomenon. Students will explore the major themes, stories, characters, and archetypes present in the mythologies of several different cultures.

This is a year-long class in which students will study major Greek and Roman myths: those stories involving the Greek/Roman gods, goddesses, and heroes such as Zeus, Apollo, Hercules, etc. Students will examine not only the origins of the classic myths but also aspects such as the present-day influence of mythology.

**Film as Literature (51099A000)**

**Grades: 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

In this semester long course, students will study film as a form of literature including the traditional literary elements of plot, setting, theme, conflict, and characterization, and film elements such as, but not limited to, visual design, cinematography, musical score, and dramatic elements. Students will view films with a critical and literary eye to explore and analyze each aspect of the films. Attendance is vital; grades will be centered on class discussions / collaborations, projects, written analyses, and homework / tests.

**Journalism (11101A000)**

**Grades: 10, 11, 12**

**Prerequisite: Grade of B in English I or CP English I**

**Credit: 1 per year**

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography, photojournalism, and digital technology skills may be included.

**Research/Technical Writing (01105A000)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

This class prepares students to write research papers and/or technical reports. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.

**Speech (01151A000)****Grade: 11, 12****Prerequisite: None****Credit: ½ per semester**

Speech will enable students, through practice, to develop communication skills that can be used in a variety of speaking situations (such as small- and large- group discussions, delivery of lectures or speeches in front of audiences, and so on.) Course topics include (but are not limited to) research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence. Students will get experience giving informative, persuasive, special occasion, demonstrative, and impromptu speeches, as well as constructing speeches. Critical thinking and listening are required and class participation is a must.

# **FAMILY AND CONSUMER SCIENCE DEPARTMENT**

## **Child and Adult Care Services (19054A000)**

**Grade: 10, 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

This course involves the study of the biological, physiological, social, and psychological needs and concerns of young children, the elderly, and/or the disabled. Additional topics may include economic and legal issues, planning daily routines; appropriate environments and activities; growth and aging processes; and techniques for managing a center or working in others' homes.

## **Food Science (22203A001)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

The scientific method is used to study foods as a combination of chemical, physical and biological sciences. Laboratory skills in measuring, recording, and analyzing data are used to explore the interrelationship of food science to the other sciences; the scientific evaluation of food, matter, electrolyte solutions, energy, nutrition; food safety; and food chemistry. Experimental methods are used to analyze food mixtures, food microbiology, fermentation, sensory processes, the preservation of foods and complex food systems. Technology is studied as it relates to product development, consumer needs and experimental designs. Emphasis is placed on emerging careers in food science and biotechnology and the application of food science in food service, nutrition, dietetics, and product development.

## **Human Growth and Development (19261A001)**

**Grade: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

This course focuses on the development and wellness of individuals and families throughout the life cycle. Topics include human development and wellness theories, principles, and practices; life cycle expectations and issues, including biological, physiological, social, and psychological needs and concerns of aging adults; community services, agencies, and resources; roles, responsibilities, and functions of families, family members and caregivers; family issues, including ethics, human worth and dignity, change, stress, neglect and abuse, and care of the care-giver; individual and family wellness planning; and fostering intergenerational relationships. Practical experiences related to these topics are included through a variety of activities such as volunteer experiences, service learning, and intergenerational event planning opportunities. Information on a variety of human and family services careers is incorporated throughout the course.

## **Parenting (22204A001)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

This course helps students understand the responsibilities, satisfactions and stresses of parenthood. Course content includes the following: managing and organizing parenting by applying decision-making and goalsetting skills; applying the basic principles of the parenting process; practicing health and safety standards as related to parenting; providing experiences which encourage parents and children to maximize resources; encouraging human relations skills in children/adolescents; community resource agencies and services; and evaluating impact on parenting of family and career changes.

# **FINE ARTS DEPARTMENT**

## **Adobe Photo Shop (05162A000)**

**Prerequisite: None**

This course will explore beginning skills and knowledge in the use of Adobe Photo Shop. Projects relate to creating advertisements, photo editing, photo manipulation and designing the yearbook cover. Discussions about possible career opportunities in graphic design will be integrated into the class.

**Grade: 11, 12**

**Credit: ½ per semester**

## **Advanced Studio (55199A000)**

**Prerequisite: successfully passed 4 semesters of art**

This class will provide serious and motivated art students instruction in silk screen process, pottery wheel and glass fusing. Students will be allowed time to develop their own interests in more depth with the medium of their choice. This class is an opportunity for students considering a field in art to increase the breadth of their portfolio.

**Grade: 11, 12**

**Credit: ½ per semester**

## **Art I (05154A000)**

**Prerequisite: None**

Students will complete a variety of projects in various mediums (clay, chalk, oil pastels, drawing pencil, acrylic paint and color pencil). Students will be introduced to basic color theory, the elements of art, and the principles of design through various projects. Examples include: still life paintings, optical illusion art, coiled clay vases, and mandala creation.

**Grade: 9, 10, 11, 12**

**Credit: ½ per semester**

## **Art II (05156A000)**

**Prerequisite: Successfully pass Art I**

Students will complete a variety of projects in various mediums. Students will begin analyzing art as well develop works based on critical thought. Students will develop use of principles of design in personal works. Specific projects include pen and ink drawing, scratch art, slab clay teapot, art history, acrylic painting, animal mosaics, and still life drawings.

**Grade: 9, 10, 11, 12**

**Credit: ½ per semester**

## **Art III (05157A000)**

**Prerequisite: Successfully pass Art I and Art II**

Students will complete projects using the following mediums: acrylic paint, watercolor, chalk, oil pastels and clay. Students will study composition theories and build on principles of designs. Assignments include oil pastel self-portrait, subtractive drawings, clay whistles, Surrealism inspired Photoshop, watercolor painting, calligraphy, and still life drawings. This class will also do an artist research-based project of their choosing.

**Grade: 10, 11, 12**

**Credit: ½ per semester**

## **Art IV (05199A000)**

**Prerequisite: Successfully pass Art I, Art II, and Art III**

This course, again, uses a variety of materials and mediums. Students will participate in critiques and developed artist statements. Students will do projects that include a clay and drawing realism project, still life drawings, charcoal abstraction drawings, and one student choice project.

**Grade: 10, 11, 12**

**Credit: ½ per semester**

## **Advanced Ceramics & Entrepreneurship (22151A001)**

**Prerequisite: Completion of Ceramics 1 with minimum final grade of 85% or higher & Teacher Recommendation**

This course will explore the various hand building and advanced throwing techniques to solve complex problems beyond basic ceramic foundations mastered in Ceramics 1, with focus on high quality functional pieces and design principles. Students will engage in group critiques and portfolio building. The entire semester will be strictly spent working with clay. This is also an entrepreneurship

**Grade: 11, 12**

**Credit: ½ per semester**



course to help advanced ceramic students develop more knowledge and skills related to ceramics. Students will also learn fundamentals of marketing their ceramic artwork.

**Ceramics 1 (05159A000)**

**Grade: 9, 10, 11, 12**

**Prerequisite: Successfully pass Art I**

**Credit: ½ per semester**

Ceramics engages students in learning experiences that include the historical and cultural context of ceramics, aesthetic inquiry, and creative production. These courses provide knowledge of ceramic techniques (e.g., kiln firing and glazing) and processes with an emphasis on creative design and craftsmanship. Courses may include clay modeling, hand building, coil building, casting, and throwing on the potter's wheel.

**Drawing & Painting (05155A000)**

**Grade: 10, 11, 12**

**Prerequisite: Successfully pass two semesters of art classes**

**Credit: ½ per semester**

This class is designed for the student who wants to strictly work on drawing techniques with various mediums and learning various painting techniques. Watercolor, acrylic, and oil paint will be used. Paintings will include landscapes, floral, abstract, and portraits. Students will explore impressionism, expressionism, and abstract expressionism style within their painting assignments. Drawings will include realistic drawings, fantasy drawings, and still life.

**Independent Art (05197A000)**

**Grade: 11, 12**

**Prerequisite: Instructor Approval**

**Credit: ½ per semester**

This course is designed for the self-motivated serious art student. Projects will be designed collaboratively with the student and teacher. Four to five projects will need to be completed per quarter or a total of eight to ten projects for the semester. Students will create a portfolio with a quarter and semester review. A student needs to take Art I, Art II, Art III, and Art IV before Independent Art can be an option.

**Graphic Designs (11154A000)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

Graphic Design courses teach students to use artistic techniques to effectively communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media.

**Photography (1052A003)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

Photography course provides instruction in the use of conventional and digital cameras. Topics covered in the course include composition and color dynamics; contact printing; enlarging; and use of camera meters.

**Photojournalism (11102A002)**

**Grade: 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and digital technology skills, and to apply their art to journalistic endeavors. These courses may also cover film development.

**Band (05101A000)****Grade: 9, 10, 11, 12****Prerequisites: Previous instrument study and / or consent of director****Credit: 1 per year**

Band is open to any student 9-12 who has an interest in learning instrumental music study. If the student has not been involved with the music department prior to joining, a meeting with the director is required.

The instrumental music program is designed to provide students with a variety of musical experiences in four (4) specific areas: marching band, concert band, pep band, and jazz band for students to gain a more thorough understanding and appreciation for all types of music; to achieve competency, artistry, and technical facility through the study and playing of a musical instrument; to instill a sense of pride and accomplishment in a team effort; to promote and encourage a sense of responsibility and self-discipline, and to encourage individual creativity through a more realistic understanding of the arts.

**\*Marching Band** performs throughout the year, with the primary focus during September and October. It performs in such events as football games, parades, and other related invitational events. Students are taught basic marching fundamentals including visual and audio commands, posture, physical, and mental coordination, teamwork, and the development of a positive self-image.

**\*Concert band** is a year-long (2 semester) organization, performing primarily from November through May, and specializes in traditional as well as contemporary band literature. Emphasis is placed on technical, expressive, and artistic selections. The band presents 2-3 major concerts per year in addition to commencement. When able, the band may perform outside the school environment such as board approved trips. Selected advanced students may elect to perform in various other activities, which include, but are not limited to: solo/ensemble contest, IMEA festivals, and honor band.

**\*Pep Band** utilizes all members of the concert band and performs at selected boys' and girls' basketball games.

**\*Jazz Band** is designed to teach students the fundamentals of jazz literature and the correlation with standard classical music. Jazz curriculum will be included within concert band. Rehearsals will be held outside of school if necessary. Students may choose to study a secondary instrument during Jazz band.

**Chorus (05110A000)****Grade: 9, 10, 11, 12****Prerequisite: None****Credit: 1 per year**

Chorus is a full year performing group, and is open to anyone in high school who has interest in singing. It is also beneficial that the student has some prior music/vocal experience, although not mandatory. A student should be able to demonstrate an ability to read music, or have the desire to learn. Students will gain knowledge in the fundamentals of singing as a vocal ensemble, vocal techniques, proper breathing, diction, sight singing, ear training, rhythm and note reading. The chorus will perform at 2-3 major concerts per year, in addition to commencement. Attendance is a requirement for these performances. The chorus also performs at community events. As a group or individually, students may attend performances or workshops intended to build vocal skills and music appreciation. Individual students may elect to participate in other music events, such as IHSA solo/ensemble contest and IMEA festivals.

**Honors Band (Honors) (05101A000)**  
**Prerequisites: Previous instrument study**  
**AND consent of director**

**Grade: 11, 12**  
**Credit: 1 per year**

High School Honors Band is based on and structured around the *Illinois Fine Arts Standards* and the *National Standards for Music Education*. Students taking this course are provided with a balanced, comprehensive study of music through the marching, pep, jazz, and concert band program.

All band course requirements are implemented, in addition to an honors curriculum. This course **requires** both ensemble and solo activities, which are designed to develop elements of musicianship including tone production, technical skills, intonation, music reading skills, listening skills, analyzing music, studying historically significant styles of literature, and integration of other applicable disciplines. Experiences include improvising, playing by ear, sight-reading, and researching music.

Students develop the ability to understand and convey composers' intent in the performance of music.

A number of public performances will serve as a culmination of daily rehearsal and musical goals. Students are **required** to participate in performance opportunities outside of the school day that support and extend learning within the classroom.

This ensemble is open to students in grades 11 and 12, or as recommended by the band director. In order for a student to be accepted into the honors course, they must have written consent obtained at a meeting with the band director. This class will meet one period a day for the entire school year.

# **FOREIGN LANGUAGE DEPARTMENT**

## **French IV (Honors) (06124A000)**

**Prerequisite: French I, French II and French III**

French IV prepares students to communicate authentically in French by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. French IV courses promote students' understanding of the relationships among the products, practices, and perspectives of French-speaking countries and cultures.

**Grade: 12**

**Credit: 1 per year**

## **Spanish I (06101A000)**

**Prerequisite: None**

Designed to introduce students to Spanish language and culture, Spanish I prepares students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on a variety of topics. They introduce the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

**Grade: 9, 10, 11, 12**

**Credit: 1 per year**

## **Spanish II (06102A000)**

**Prerequisite: Spanish I**

Spanish II builds upon skills developed in Spanish I, preparing students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information on concrete topics. Spanish II courses introduce the relationships among the products, practices, and perspectives of Spanish-speaking cultures.

**Grade: 10, 11, 12**

**Credit: 1 per year**

## **Spanish III (Honors) (06103A000)**

**Prerequisites: Spanish I, Spanish II**

Spanish III prepares students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. These courses expand students' knowledge of relationships among the products, practices, and perspectives of Spanish-speaking countries and cultures.

**Grade: 11, 12**

**Credit: 1 per year**

## **Spanish IV (Honors) (06104A000)**

**Prerequisites: Spanish I, Spanish II and Spanish III**

Spanish IV prepares students to communicate authentically in Spanish by interpreting (reading, listening, viewing), exchanging (speaking and listening; reading and writing), and presenting (speaking, writing) information, concepts, and ideas on a variety of topics, including connections to other subject areas. Spanish IV courses promote students' understanding of the relationships among the products, practices, and perspectives of Spanish-speaking countries and cultures.

**Grade: 12**

**Credit: 1 per year**

# **FRESHMAN SEQUENCE**

## **Driver Education (08151A000)**

**Grade: 9, 10, 11**

**Prerequisite:**

**Credit: ½ per quarter**

**Must successfully complete the previous two semesters of school work prior to eligibility for enrollment**

Students must receive a passing grade in at least eight (8) courses during the previous two (2) semesters prior to enrolling in a driver education course.

Students who are absent (excused or unexcused) over the allotted days will have to retake the class and must repay the fee. The fee for Driver Education will be paid each time a student takes the class. The fee must be paid before the student is allowed to drive with the instructor. **NO EXCEPTIONS!**

Open to: All residents of North Mac #34 who are acquiring a driver's license during the term of the course and who are at least 15 years old but have not reached 18 years of age.

\*\*To obtain a passing grade in the classroom portion students will need to receive a letter grade of "C" or better.

Drivers' Education provides students with the knowledge to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). After the 9 week classroom portion, the student must complete a minimum of six clock hours of behind-the-wheel experience to qualify for completion this course. The drivers' education instructor will schedule the behind-the-wheel portion with the student either before, during, or after school.

## **Health (08051A000)**

**Grade: 9, 10**

**Prerequisite: None**

**Credit: ½ per semester**

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The course may also include brief studies of environmental health, personal development, and/or community resources. The course may also include CPR training and how to correctly use an AED.

## **Leader in Me (22102A000)**

**Grade: 9**

**Prerequisite: None**

**Credit: ½ per quarter**

This courses provide students with an introduction to the culture of their school so that they understand staff expectations and the school's structure and conventions. This course will educate our students on how to take ownership over their decisions in and out of the school setting. The course is designed to create student leaders and promote responsibility for their own actions.

# **MATHEMATICS DEPARTMENT**

## **Pre-Algebra (02051A000)**

**Grade: 9**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Pre-Algebra increases 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.

## **College Prep Algebra I (Honors) (02052A000)**

**Grade: 9**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

This course is the foundation of the math curriculum with a deeper level of understanding and an emphasis on critical thinking. This course generally covers the same topics as Algebra I but at a much faster pace with more independence. Topics include solving equations and inequalities, functions, linear equations and graphs, systems of equations, exponents and polynomials, including factoring, and quadratic functions and equations. **Any student receiving below a "C" average at semester will be evaluated to determine whether the student should continue in College Prep Algebra I or be transferred to Algebra I.**

## **Algebra I (02052A000)**

**Grade: 9,**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Algebra I includes 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.

## **College Prep Geometry (Honors) (02057A000)**

**Grade: 9, 10**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

This course provides the fundamentals of points, lines, planes, and angles. We will cover proofs, logical reasoning, congruent polygons, coordinate geometry, basic trigonometry, and transformations. Algebraic skills are reviewed and strengthened as they are applied to geometric situations. Topics will be explored in depth, and some advanced topics added as time allows. **Any student receiving below a "C" average at semester will be evaluated to determine whether the student should continue in College Prep Geometry or be transferred to Geometry.**

## **Geometry (02072A000)**

**Grade: 9, 10**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

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.

## **College Prep Algebra II (Honors) (02057A000)**

**Grade: 10, 11, 12**

**Prerequisites: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

This course will review some concepts from Algebra I, taking many to a deeper level of understanding. New topics will include matrices, advanced functions, complex numbers and introduction to pre-calculus and trigonometry topics. Several topics will be explored in greater depth than the standard Algebra II course. Furthermore, there will be a greater emphasis on modeling real-world scenarios, abstract problem solving, and critical thinking. **Any student receiving below a "C"**

**average at semester will be evaluated to determine whether the student should continue in College Prep Algebra II or be transferred to Algebra II.**

**Algebra II (02056A000)**

**Grade: 10, 11, 12**

**Prerequisites: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Algebra II topics include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

**Pre-Calculus (Honors) (02110A000)**

**Grade: 11, 12**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Pre-Calculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

**Transitional Math - STEM (02055A001)**

**Grade: 12**

**Prerequisites: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Math course framework built around essential algebraic competencies designed to prepare students for college and career pathways in areas such as: Science, Technology, Engineering, and Math or STEM which require advanced algebraic skills or calculus. Course design will enable students to transition directly into credit bearing college-level algebra courses. Students will engage in deepening conceptual understanding using algebra and mathematical applications of algebra and functions and how functions naturally arise using authentic modeling situations. The function families (linear, polynomial, rational, radical, and exponential) will be emphasized. Additionally, the course shall emphasize the eight mathematical practices, particularly modeling within the setting of authentic and contextualized applications, and upon completion, the student should be able to: demonstrate and justify both orally and in writing conceptual understanding of functions combined with advanced algebraic knowledge to solve complex, contextualized, multi-step problems in authentic settings.

**Advanced Placement Calculus AB (Honors) (02124A000)**

**Grade: 12**

**Prerequisite: iReady Scores & Teacher Recommendation**

**Credit: 1 per year**

Following the College Board's suggested curriculum designed to parallel college-level calculus courses, AP Calculus AB provides students with an intuitive understanding of the concepts of calculus and experience with its methods and applications. This rigorous course introduces calculus and include the following topics: elementary functions; properties of functions and their graphs; limits and continuity; differential calculus (including definition of the derivative, derivative formulas, theorems about derivatives, geometric applications, optimization problems, and rate-of-change problems); and integral calculus (including antiderivatives and the definite integral). Students enrolled in this course should plan to take the AP test in May. **Any student receiving below a "C" average at semester will be evaluated to determine whether the student should continue in AP Calculus or transferred to another math course.**

# **PHYSICAL EDUCATION DEPARTMENT**

## **Activities Physical Education (08001A000)**

**Grade: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

This course provides elementary through advanced physical skills in a variety of organized games and activities. Building social skills, including sportsmanship, is a priority of this physical education class. Grades are based on effort, attitude, and participation. A short written test will be given over each sport / activity in which the student participates. Activities will include basketball, dance, badminton, and a variety of other organized sports and activities. This course will also include beginning level fitness activities to include light jogging, walking, Pilates, and kickboxing. Students will be required to dress in the approved physical education uniform on a daily basis.

## **Fitness Physical Education (08005A000)**

**Grade: 9, 10, 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

This course will provide a weight lifting program, plyometric and agility training, and cardiovascular activities. This course is designed to improve the overall health and fitness for the student athlete or any student serious about lifetime fitness. Individual goal setting and personal responsibility will also be stressed. Grades are based on effort, attitude, and participation. Students will be required to dress in the approved physical education uniform on a daily basis. **This course is highly recommended for all student athletes.**

## **Exemption from Physical Education Requirement:**

A student in grades 9-12 may submit a written request to the building principal to be excused from physical education courses for the reasons stated below:

Grades 9-12: Enrollment in a marching band program for credit (1<sup>st</sup> semester only)

Grades 11-12: Ongoing participation in an interscholastic athletic program (Opt out for a study hall)

Grades 11-12: Enrollment in academic classes that are required for admission to an institution of higher learning

Grades 11-12: Enrollment in academic classes that are required for graduation from high school, provided that failure to take such classes will result in the student being unable to graduate.



# **SCIENCE DEPARTMENT**

## **Biology I (03051A000)**

**Prerequisite: None**

Biology I is designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

**Grade: 9, 10**

**Credit: 1 per year**

## **Chemistry I (03101A000)**

**Prerequisite: None**

Chemistry I involves studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. This course is an introductory course designed to prepare the college bound student for college chemistry courses. A calculator is required.

**Grade: 10, 11, 12**

**Credit: 1 per year**

## **Chemistry II (Honors) (03102A000)**

**Prerequisite: Grade of B or better in Chemistry I**

This course is an extension of Chemistry I. Topics include liquids and solids, solutions, acids and bases, and chemical equilibrium. This course is designed to prepare the college bound student for college chemistry courses. A calculator is required.

**Grade: 11, 12**

**Credit: ½ per semester**

## **Earth Science (03001A000)**

**Prerequisite: None**

Earth Science offers insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.

**Grade: 10, 11, 12**

**Credit: 1 per year**

## **Genetics (Honors) (03059A000)**

**Prerequisite: None**

Genetics provides students with an understanding of general concepts concerning genes, heredity, and variation of organisms. Course topics typically include chromosomes, the structure of DNA and RNA molecules, and dominant and recessive inheritance and may also include lethal alleles, epistasis and hypostasis, and polygenic inheritance.

**Grade: 11, 12**

**Credit: ½ per semester**

## **Human Anatomy & Physiology (Honors) (03053A000)**

**Prerequisite: Grade of B or better in Biology I**

Human Anatomy and Physiology presents the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals. A field trip to study cadavers may also be included. *This course will be offered every other year starting in 2023-2024.*

**Grade: 11, 12**

**Credit: 1 per year**

**Microbiology (Honors) (03060A000)****Grade: 11, 12****Prerequisite: None****Credit: ½ per semester**

Microbiology provides students with a general understanding of microbes, prokaryotic and eukaryotic cells, and the three domain systems. Additional topics covered may include bacterial control, cell structure, fungi, protozoa, viruses and immunity, microbial genetics, and metabolism.

**Organic Chemistry (Honors) (03103A000)****Grade: 11, 12****Prerequisite: Teacher Recommendation****Credit: 1 per year**

Organic Chemistry involves the study of organic molecules and functional groups. Topics covered may include nomenclature, bonding molecular structure and reactivity, reaction mechanisms, and current spectroscopic techniques.

**Physics (Honors) (03151A000)****Grade: 11, 12****Prerequisite: Pre-Calculus or concurrent enrollment in Pre-Calculus** **Credit: 1 per year**

Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

**Zoology (03061A000)****Grade: 11, 12****Prerequisite: None****Credit: 1 per year**

Zoology provides students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. These courses should also help students develop an awareness and understanding of biotic communities.

*This course will be offered every other year starting in 2024-2025.*

# **SOCIAL STUDIES DEPARTMENT**

## **20<sup>th</sup> Century Global History (04053A000)**

**Prerequisite: None**

**Grade: 10, 11, 12**

**Credit: 1 per year**

This course will focus on the history of modern world history from 1900 through the new millennium. Focus will be made on global conflict, such as World War I, World War II, the Korean War, the Vietnam War, and the Gulf War. Additional emphasis will be placed on lesser-known countries and significant events which have global impact. Students will learn how events around the globe impact life today, and how we can improve relations with other countries by understanding their histories.

## **American Government – Civics (04161A000)**

**Prerequisite: Counselor recommendation for any non-senior**

**Grade: 12**

**Credit: ½ per semester**

Civics examines the general structure and functions of U.S. systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve to the same degree of detail into constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government. The Federal and Illinois Constitution exams will be included in the curriculum and successfully passing both is required for graduation.

## **Current Events (04064A000)**

**Prerequisite: None**

**Grade: 10, 11, 12**

**Credit: 1 per year**

Current Events enables students to study political, economic, and social issues facing the world. This course may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.

## **History of Oppression (04062A000)**

**Prerequisite: None**

**Grade: 11, 12**

**Credit: 1 per year**

This course is designed to dig deeper into the history that is often forgotten. Students are assigned readings in this course which aid a student led lecture. Along with the readings and lectures, students dissect and analyze numerous primary source images and documents which further their understanding of oppressed societies in history. Allowing students to read and work with hands on sources gives them the benefit of a "time machine learning technique" where they can almost visualize themselves in that time period. The course discusses topics of oppressed societies throughout history including the origins of slavery and the trans-Atlantic slave trade, Native American removal and boarding schools, the Armenian Genocide, labor laws in the early 20th century, the rise of Nazi Germany and the Holocaust, and more.

## **Illinois History (04105A000)**

**Prerequisite: None**

**Grade: 9, 10, 11, 12**

**Credit: ½ per semester**

The course begins with the settlement of the Northwest Territory, focusing on the life in the frontier Illinois. Students will learn to use local and primary resources in researching historical information about our state and region, and will learn about the important role Illinois has played in the development of the United States from its beginnings as a territory, through the Civil War, to the present day.

**Psychology (04254A000)****Prerequisite: None**

Psychology introduces students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

**Grade: 11, 12****Credit: 1 per year****Social Studies (04305A000)****Prerequisite: None**

Social Studies courses enable students to study a group of related subjects addressing the elements and structures of human society that may include economics, geography, history, citizenship, and other social studies-related disciplines.

**Grade: 9, 10****Credit: 1 per year****Sociology (04258A000)****Prerequisite: None**

Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

**Grade: 11, 12****Credit: 1 per year****AP United States History (04104A000)****Prerequisite: Counselor Recommendation**

This course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials – their relevance to a given interpretive problem, reliability, and importance – and to weigh the evidence and interpretations presented in historical scholarship.

**Grade: 11****Credit: 1 per year**

AP United States History is designed to prepare students for the rigor of scholarship and writing expected in college-level courses. Students study history as a series of interconnected events rather than as isolated dates, learning to critically analyze the cause and effect relationships of those events. As students progress through the course, they learn to find and assess primary documents as well as secondary sources. Finally, students learn to incorporate outside sources into persuasive essays that demonstrate logical reasoning and present evidence to support the author's conclusions.

**United States History (04101A000)****Prerequisite: None**

The history of the United States is evaluated and analyzed beginning with the Civil War and continuing through the new millennium. Students will investigate primary source material from all eras to draw their own conclusions about what we have been taught about history and will learn to evaluate sources for validity and interpretation. Students will examine all corners of United States history including contributions from all races, all genders, and underserved populations. Passing this course fulfills the US History graduation requirement.

**Grade: 11****Credit: 1 per year****Women in History (04062A000)****Prerequisite: None**

This course will focus on the contributions of women across global history. Students will student the influence of women on important issues from Cleopatra, Greece, and Rome, through monarchies and revolutions in Europe to the impact women have had on American history. This course is topical and focuses solely on the development and influence of women on global history.

**Grade: 9, 10, 11, 12****Credit: ½ per semester**

**World History (04051A000)****Grade: 10, 11, 12****Prerequisite: None****Credit: 1 per year**

This course provides a general survey of important historical events which have played a part in the development of today's world and cultures from ancient times until present-day. Topics may range widely across all aspects of the human experience including, economics, science, religion, philosophy, politics and law, military conflict, literature and the arts. The general purpose of the course is to develop within students a sense of historical perspective, including the ability to realize the importance of events as they happen in today's world. Students will refine their ability to read for comprehension and critical analysis; summarize, compare and evaluate information; write clearly and convincingly; and express facts and opinions orally.

# **STEM**

**Technological Design and Innovation (21054A001)**

**Grade: 10, 11, 12**

**Prerequisite: None**

**Credit: 1 per year**

In this course, technological design and innovation are presented through practical applications. Students apply technology, science, and mathematics concepts and skills to solve technological/engineering problems and innovative designs. Students research, develop, create simulations, test, and analyze engineering designs using criteria such as design effectiveness, public safety and human factors.

# **MISCELLANEOUS COURSES**

## **CEO Program**

**Grade: 12**

**Prerequisite: Application Approval (Due in March)**

**Credit: 2 per year**

This course covers the basics of conceptualizing, starting and running a small business. Concepts such as supply and demand, cost/benefit analysis, competitive advantage, and opportunity recognition will be covered. In addition, coursework will include: innovative thinking strategies, product development, business structure, marketing, financial strategies, and recordkeeping. Skills such as preparing an income statement, balance sheet, income, and cash flow statements will be covered. Entrepreneurial thinking (outside-the-box problem solving) will be utilized throughout the course. Students will learn from area business owners, visit area businesses, write business plans, and start their own businesses. Students also will have opportunities for job shadowing and business mentor relationships. Students will present their business plans to an advisory team. The course is built around the National Entrepreneurship Standards and is linked to the Illinois Learning Standards.

## **Correspondence Courses**

**Grade: 9, 10, 11, 12**

**Prerequisite: Application and approval (Handbook policy)**

**Credit: Varies**

A student may enroll in a correspondence course to receive high school credit for work completed, provided:

- The course is given by an institution accredited by the North Central Association of Colleges and Secondary Schools,
- The student assumes responsibility for all fees,
- The building principal or school counselor approves the course in advance, and
- A maximum of four (4) credits may be counted toward the requirements for a student's high school graduation (principal approval is required).

## **Credit Recovery Program (22004A000)**

**Grade: 10, 11, 12**

**Prerequisite: None**

**Credit: ½ per semester**

Credit Recovery Program courses vary widely, but typically are targeted at students who have been identified as being at risk of dropping out of or failing in school. Course content may include study skills and individual tutorials; career exploration or job readiness skills; communication skills; personal assessment and awareness activities; speaker presentations; and small-group seminars.

## **On-Line Course**

**Grade: 11, 12**

**Prerequisite: Approval of Counselor and/or Principal**

**Credit: ½ per semester**

A student enrolled in an online or virtual course, may receive high school credit for work completed provided:

- The course is offered by an institution approved by the superintendent or designee,
- The course is not offered at the student's high school,
- The student assumes responsibility for all fees (including tuition and textbooks), and
- The building principal or school counselor approves the course in advance.

Students may be limited as to the number of online courses that apply toward high school credit. Grades earned in approved online course count toward a student's grade point average, class rank, and eligibility for athletic and extracurricular activities. Students cannot drop a subject without the permission of the principal after the end of the third week of the semester without receiving a "W" grade.

# **NCAA CLEARINGHOUSE ELIGIBILITY**

## **DIVISION I**

If you enroll in a Division I college and want to participate in athletics or receive an athletic scholarship during your first year, you must:

- 1) Graduate from high school
- 2) Complete these 16 core courses:
  - ❖ 4 years of English
  - ❖ 3 years of Math (Algebra I or higher)
  - ❖ 2 years of Science (including one year of lab science if offered by your high school)
  - ❖ 1 extra year of English, Math, or Science
  - ❖ 2 years of Social Science
  - ❖ 4 years of extra core courses (from any category above, or foreign language, nondoctrinal religion or philosophy)
- 3) Complete 10 core courses before your 7<sup>th</sup> semester of high school
- 4) Earn the minimum required grade-point average of 2.30 in your core courses: and

## **DIVISION II**

If you enroll in a Division II college and want to participate in athletics or receive an athletic scholarship during your first year, you must:

- 1) Graduate from high school
- 2) Complete these 16 core courses:
  - ❖ 3 years of English
  - ❖ 2 years of Math (Algebra I or higher)
  - ❖ 2 years of Science (including one year of lab science if offered by your high school)
  - ❖ 3 additional years of English, Math, or Science
  - ❖ 2 years of Social Science; and
  - ❖ 4 years of extra core courses (from any category above, or foreign language, comparative religion or philosophy)
- 3) Earn the minimum required grade-point average of 2.20 in your core courses: and

## **DIVISION III**

Division III does not use the Eligibility Center. Contact your Division III College or University regarding its policies on admission, financial aid, practice, and competition.

**FOR CURRENT UP TO DATE INFORMATION ON NCAA ELIGIBILITY – See NCAA.ORG**



**NORTH MAC HIGH SCHOOL**  
**CLASS SELECTION**  
**FRESHMAN - CLASS OF 2027**

<b><u>ENGLISH</u></b>  College Prep English I English I	<b><u>MATHEMATICS</u></b>  Pre-Algebra College Prep Algebra I Algebra I College Prep Geometry Geometry	<b><u>SCIENCE</u></b>  Biology I	<b><u>SOCIAL STUDIES</u></b>  Illinois History Social Studies Women in History
<b><u>AGRICULTURE</u></b>  Introduction to Agriculture          <b><u>FOREIGN LANGUAGE</u></b>  Spanish I	<b><u>BUSINESS &amp; TECHNOLOGY</u></b>  Advertisement & Document Design Business Technology & Concepts Web Page Design	<b><u>FAMILY &amp; CONSUMER SCIENCE</u></b>  Human Growth & Development      <b><u>MISCELLANEOUS</u></b>  Credit Recovery Program Driver Education Health Leader in Me Activities Physical Education Fitness Physical Education Study Hall	<b><u>FINE ARTS</u></b>  Art I Art II Ceramics 1 Band Chorus

**NORTH MAC HIGH SCHOOL**  
**CLASS SELECTION**  
**SOPHOMORE – CLASS OF 2026**

<b><u>ENGLISH</u></b>	<b><u>MATHEMATICS</u></b>	<b><u>SCIENCE</u></b>	<b><u>SOCIAL STUDIES</u></b>
College Prep English II English II Journalism	College Prep Geometry Geometry College Prep Algebra II Algebra II	Biology I Earth Science Chemistry I	20th Century Global History Current Events Illinois History Social Studies Women in History World History

<b><u>AGRICULTURE</u></b>	<b><u>BUSINESS &amp; TECHNOLOGY</u></b>	<b><u>FAMILY &amp; CONSUMER SCIENCE</u></b>	<b><u>FINE ARTS</u></b>
Introduction to Agriculture  Animal Science	Advertisement & Document Design  Business Law  Business Technology & Concepts  Sports and Entertainment Marketing  Technological Design & Innovation  Web Page Design	Child & Adult Care Services  Human Growth & Development	Art I  Art II  Art III  Art IV  Ceramics 1  Drawing & Painting  Band  Chorus
<b><u>FOREIGN LANGUAGE</u></b>		<b><u>MISCELLANEOUS</u></b>	
Spanish I  Spanish II		Credit Recovery Program  Driver Education  Health  Activities Physical Education  Fitness Physical Education  Study Hall	

**NORTH MAC HIGH SCHOOL**  
**CLASS SELECTION**  
**JUNIOR – CLASS OF 2025**

<b><u>ENGLISH</u></b>	<b><u>MATHEMATICS</u></b>	<b><u>SCIENCE</u></b>	<b><u>SOCIAL STUDIES</u></b>
College Prep English III English III Classical Mythology Film as Literature Journalism Research/Technical Writing Speech	College Prep Algebra II Algebra II Pre-Calculus	Chemistry I Chemistry II Earth Science Genetics Human Anatomy / Physiology Microbiology Organic Chemistry Physics Zoology (2024-2025)	20th Century Global History Current Events History of Oppression Illinois History Psychology Sociology AP United States History United States History Women in History World History
<b><u>AGRICULTURE</u></b>	<b><u>BUSINESS &amp; TECHNOLOGY</u></b>	<b><u>FAMILY &amp; CONSUMER SCIENCE</u></b>	<b><u>FINE ARTS</u></b>
Agriculture Business Animal Science Floral Design & Marketing Horticulture Science Introduction to Agriculture  <b><u>FOREIGN LANGUAGE</u></b> Spanish I Spanish II Spanish III	Advertisement & Document Design Business Law Business Technology & Concepts Computer Applications Computer Programming Sports and Entertainment Marketing Technological Design & Innovation Video Production Web Page Design	Child & Adult Care Services Food Science Human Growth & Development Parenting  <b><u>MISCELLANEOUS</u></b> CACC Programs Credit Recovery Program Driver Education Health Activities Physical Education Fitness Physical Education On-line College Courses Study Hall	Adobe Photo Shop Advanced Studio Art I Art II Art III Art IV Ceramics 1 Advanced Ceramics Drawing & Painting Graphics Designs Photography Photojournalism Independent Art Band Chorus Honors Band

**NORTH MAC HIGH SCHOOL**  
**CLASS SELECTION**  
**SENIOR – CLASS OF 2024**

<b><u>ENGLISH</u></b>	<b><u>MATHEMATICS</u></b>	<b><u>SCIENCE</u></b>	<b><u>SOCIAL STUDIES</u></b>
College Prep English IV English IV Classical Mythology Film as Literature Journalism Research/Technical Writing Speech	College Prep Algebra II Algebra II Pre-Calculus Transitional Math - STEM AP Calculus	Chemistry II Earth Science Genetics Human Anatomy / Physiology Microbiology Organic Chemistry Physics	20th Century Global History American Government-Civics Current Events History of Oppression Illinois History Psychology Sociology Women in History World History

<b><u>AGRICULTURE</u></b>	<b><u>BUSINESS &amp; TECHNOLOGY</u></b>	<b><u>FAMILY &amp; CONSUMER SCIENCE</u></b>	<b><u>FINE ARTS</u></b>
Agriculture Business Animal Science Floral Design & Marketing Horticulture Science Introduction to Agriculture	Advertisement & Document Design Business Law Business Technology & Concepts Computer Applications Computer Programming Sports and Entertainment Marketing Technological Design & Innovation Video Production Web Page Design	Child & Adult Care Services Consumer Economics/Personal Finances Food Science Human Growth & Development Parenting	Adobe Photo Shop Advanced Studio Art I Art II Art III Art IV Ceramics 1 Advanced Ceramics Drawing & Painting Graphics Designs Photography Photojournalism Independent Art Band Chorus Honors Band
<b><u>FOREIGN LANGUAGE</u></b>		<b><u>MISCELLANEOUS</u></b>	
French IV Spanish I Spanish II Spanish III Spanish IV		CACC Programs CEO Program Credit Recovery Program Driver Education Health Activities Physical Education Fitness Physical Education On-line College Courses Study Hall	