5103 Farwell St.
McFarland, WI 53558
Telephone: 838-3166
Fax: 838-4562
Web Site: www.mcfarland.k12.wi.us

COURSE GUIDE
2016/2017

If you need assistance in Spanish please contact Student Services at 838-4512. Si usted necesita ayuda en español por favor pongase en contacto con la Oficina de Servicios para los Estudiantes al teléfono 838-4512.

The McFarland School District does not discriminate on the basis of race, color, religion, national origin, ancestry, creed, pregnancy, marital status, parental status, sexual orientation, sex, including transgender status, change of sex or gender identity, English language proficiency, age (except as authorized by law), military status, or physical, mental, emotional, or learning disability in any of its students program and activities. The Board also does not discriminate on the basis of Protected Classes in its employment policies and practices as they relate to students and does not tolerate harassment of any kind. Equal Protected Classes, race, color, national origin, sex, disability, age (unless age is a factor necessary to normal operation or the achievement of any legitimate objective of the program/activity), place of residence within the boundaries of the District, or social or economic background, to learn through the curriculum offered in this District.
# TABLE OF CONTENTS

### CAREER CLUSTER INFORMATION

Career Clusters are a result of national career-focused education reform and link what students learn in school with the knowledge and skills they need for success in college and careers. Career clusters identify pathways from secondary school to two- and four-year colleges, graduate school and the workplace. This connection to future goals motivates students to work harder and enroll in more rigorous courses. Within pages 4-35 are descriptions of the 16 Career Clusters and additional information including course suggestions and career options. All freshmen take the Career Cluster Interest Survey which identifies student career interests. More information can be found at: www.careerclusters.org

### SOME THINGS TO CONSIDER WHEN REGISTERING FOR CLASSES

- MHS GRADUATION REQUIREMENTS
- PROGRAM CHANGE AND DROPPING SUBJECTS:
- MHS GRADING SCALE AND RELATED INFORMATION
- PREPARING FOR THE AMERICAN COLLEGE TEST (ACT)
- NCAA Initial Eligibility Clearinghouse
- EXTENDED EDUCATIONAL OPPORTUNITIES AT MCFARLAND HIGH SCHOOL
- ADVANCED PLACEMENT COURSES
- AVENTA COURSES
- ART
- BUSINESS EDUCATION
- COMPUTER STUDIES
- DRIVER EDUCATION
- ENGLISH
- FAMILY & CONSUMER SCIENCES
- HEALTH
- INDEPENDENT STUDY
- INTEGRATED STUDENT SERVICES
- MATHEMATICS
- MUSIC
- PHYSICAL EDUCATION
- SCIENCE
- SOCIAL STUDIES
- TECHNOLOGY AND ENGINEERING
- WORLD LANGUAGES
- YOUTH APPRENTICESHIP PROGRAMS
- LEGAL NOTICES
- DIRECTORY INFORMATION
Agriculture in Wisconsin includes science, marketing, service, production, supply, processing, preservation of the food supply, plants, animals and natural resources. This area employs over 12 percent of Wisconsin’s workforce.

Do you have an interest in:

**Animals**
- Working with sick or injured animals
- Working with companion animals like dogs and cats
- Working with unique species such as fish for food
- A medical field
- Marine biology

**Plants**
- Caring for plants in your home or yard
- Designing landscapes for homes or businesses
- Developing new plants or modifying existing ones
- What plants need to grow successfully

**Natural Resources**
- Native fish and their aquatic habits
- Forest ecosystems
- Preservation of endangered species
- Wolves and whitetails in Wisconsin

**Foods**
- What makes bread rise and pop fizz
- Being a food scientist
- Designing new food and flavors
- How science is used to process your food

**PATHWAYS IN THIS CLUSTER**
- Food Products and Processing Systems
- Plant Systems
- Animal Systems
- Power, Structural & Technical Systems
- Natural Resource Systems
- Environmental Service Systems
- Agribusiness Systems

**Recommended Courses By Pathway**

McFarland High School Course Offerings

**Agriculture Food and Natural Resources**

- Biotechnology
- Construction Skills
- Chemistry/AP Chemistry
- Physics/AP Physics
- Introduction to Technology
- Food Choices
- Environmental Science
- Air Cooled Engines

**Building and Trades**
- Introduction to Engineering
- Production Agriculture Apprenticeship
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

<table>
<thead>
<tr>
<th>Bee Keeper</th>
<th>Fisherman</th>
<th>Nursery Worker</th>
<th>Stable Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Sprayer</td>
<td>Landscape Laborer</td>
<td>Pet Groomer</td>
<td>Vet Hospital Worker</td>
</tr>
<tr>
<td>Farm Worker</td>
<td>Logger</td>
<td>Pet Shop Worker</td>
<td></td>
</tr>
</tbody>
</table>

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

<table>
<thead>
<tr>
<th>Aborist</th>
<th>Crop &amp;/or Animal Farmer</th>
<th>Golf Course Manager</th>
<th>Veterinary Technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Control Officer</td>
<td>Environmental Technician</td>
<td>Greenhouse Manager</td>
<td>Waste Water Technician</td>
</tr>
<tr>
<td>Animal Nutritionist</td>
<td>Farrier</td>
<td>Horticulturist</td>
<td></td>
</tr>
<tr>
<td>Bio-Tech Lab Technician</td>
<td>Fish &amp; Game Officer</td>
<td>Landscape Designer</td>
<td></td>
</tr>
<tr>
<td>Cheese Maker</td>
<td>Forestry Technician</td>
<td>Quality Food Control Specialist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genetic Technologist</td>
<td>Turf Manager</td>
<td></td>
</tr>
</tbody>
</table>

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

<table>
<thead>
<tr>
<th>Agricultural Commodities Broker</th>
<th>Animal Scientist</th>
<th>Geneticist</th>
<th>Soil Scientist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Economist</td>
<td>Biochemist</td>
<td>Greenhouse Operator</td>
<td>Toxicologist</td>
</tr>
<tr>
<td>Agricultural Educator</td>
<td>Botanist</td>
<td>Landscape Architect</td>
<td>USDA Inspector</td>
</tr>
<tr>
<td>Agricultural Engineer</td>
<td>Entomologist</td>
<td>Marine Biologist</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>Agricultural Sales &amp; Communications</td>
<td>Food Scientist</td>
<td>Plant Pathologist</td>
<td>Wildlife Biologist</td>
</tr>
<tr>
<td>Agriculture Banker</td>
<td>Forester</td>
<td>Soil Geologist</td>
<td>Zoologist</td>
</tr>
<tr>
<td>Animal Psychologist</td>
<td>Game Warden</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CLUSTER KNOWLEDGE & SKILLS
Careers in designing, planning, managing, building, and maintaining the built environment.

INTERESTS & ABILITIES

Activities that describe what I like to do:

- Read and follow blueprints and/or instructions.
- Picture in my mind what a finished product looks like.
- Work with my hands.
- Perform work that requires precise results
- Solve technical problems
- Visit and learn from beautiful, historic, or interesting buildings
- Follow logical, step-by-step procedures

Personal qualities that describe me:

- Curious
- Good at following directions
- Pay attention to detail
- Good at visualizing possibilities
- Patient and persistent

School subjects that I like:

- Math
- Drafting
- Physical Sciences
- Construction Trades
- Electrical Trades/Heat, Air Conditioning and Refrigeration/Technology Education

PATHWAYS IN THIS CLUSTER

- Design/Pre-Construction
- Construction
- Maintenance/Operations

Recommended Courses

McFarland High School Course Offerings

Architecture and Construction
- Building Trades
- Architecture Design
- Advanced Architecture Design
- Introduction to Technology
- Introduction to Engineering
- Digital Electronics (offered 2015-16)
- Physics/AP Physics
- Architecture or Construction Apprenticeship.
- Construction Skills
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Construction Laborer  Highway Maintenance  Grading & Leveling Machine Operator
Construction Worker Helper  Worker  Heavy Equipment Operator
Fence Builder  Roofer  Groundskeeper and Gardener

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

HVAC Technician  Electrician  Civil Engineering Technician
Architectural Drafter  Glazier  Electrical Engineering Technician
Bricklayer  Pipefitter
Carpenter  Plasterer
Cement Mason  Plumber
Drywall Installer  Tile Setter

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Architect  Cost Estimator  Interior Design
Building Contractor  Electrical Engineer  Landscape Architect
C.A.D. Designer  Grounds Supervisor
Civil Engineer

CLUSTER KNOWLEDGE & SKILLS
**Interests & Abilities**

Activities that describe what I like to do:
- Use my imagination to communicate new information to others
- Perform in front of others
- Read and write
- Play a musical instrument
- Perform creative, artistic activities
- Use video and recording technology
- Design brochures and posters

Personal qualities that describe me:
- Creative and imaginative
- Good communicator/good vocabulary
- Curious about new technology
- Relate well to feelings and thoughts of others
- Determined/tenacious

School subjects that I like:
- Art/Graphic design
- Music
- Speech and Drama
- Journalism/Literature
- Audiovisual Technologies

**Pathways in This Cluster**
- Audio and Video Technology and Film
- Printing Technology
- Visual Arts
- Performing Arts
- Journalism and Broadcasting
- Telecommunications

---

**Recommended Courses**

McFarland High School Course Offerings
Arts, A/V Technology and Communications
- Art 1, 2, and 3
- Film Theory
- Communication Arts
- Graphic Design
- Web Page Design 2
- Advanced Computers/Multimedia Production
- Video Engineering
- Digital Electronics (offered 2015-16)
- Printing and Graphic Arts Apprenticeship

Advanced Technology
Computer Science and Engineering
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Floral Designer
Food Stylist
Musician

Proofreader
Sign Designer/Painter
Stained Glass

Mural Painter
Photographer
Pre-Press

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Animator
Bookbinder
Broadcast Technician
Caption Writer
Communications Line Maintainers
Craft Artist
Prepress Technician
Printing Press Operator
Recording Technician
Taxidermist
Public Relations Manager
Sign Painter
Potter
Graphic Designer
Music Repair Technician
Recording Technician

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Animator
Artist
Cinematographer
Composer
Copy Editor
Dancer
Photographer
Potter
Set Designers Reporter
Illustrator
Jeweler
Architech
Interior Decorator
Art Teacher
Art Professor
Art Therapist
Graphic Designer
Videographer

Journalist
Musician
Music Teacher
Music Therapist
Composer
Recording Engineer
Music Repair

CLUSTER KNOWLEDGE & SKILLS
Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.

INTERESTS & ABILITIES

Activities that describe what I like to do:
- Perform routine, organized activities but can be flexible
- Work with numbers and detailed information
- Be the leader in a group
- Make business contact with people
- Work with computer programs
- Create reports and communicate ideas
- Plan my work and follow instructions without close supervision

Personal qualities that describe me:
- Organized
- Practical and logical
- Patient
- Tactful
- Responsible

School subjects that I like:
- Computer Applications/Business and Information Technology
- Accounting
- Math
- English
- Economics

PATHWAYS IN THIS CLUSTER

- Administrative Services
- Business Information Management
- General Management
- Human Resource Management
- Operations Management

Recommended Courses

McFarland High School Course Offerings

- Business Management and Administration
- Accounting/College Accounting
- Exploring Business
- Personal and Business Law
- Advanced Technology
- Computer Science and Engineering
- Communication Arts
- Psychology
- Sociology
Career Options

BEGINNING CAREERS
On-the-job training and/or minimal experience

Bank Teller  Sales Clerk  Hospital Admitting Clerk
Caterer  Telephone Operator  Data Entry Clerk
File Clerk  Typist
Mail Clerk  Human Resource Clerk
Meter Reader  Hotel Clerk
Receptionist  Billing, Cost & Rate Clerk

SEMI-PROFESSIONAL CAREERS
Community college, technical college, apprenticeship, experience

Accountant  Stenographer  Management Trainee
Administrative Assistant  Tax Preparer  Word Processor
Computer Operator  Funeral Director  Retail Sales Supervisor
Court Reporter
Kennel Owner
Small Business Owner

PROFESSIONAL CAREERS
 Colleges/Universities

Accountant-CPA  Human Resource Manager  Travel Agency Manager
Advertising Manager  Instrument Sales/Manufacturing  Musician’s Agent
Art Director  Marketing Manager  Event Planner
Business and Industry  Marketing Music Jingle Writer
Consultant  Sales Representative
Health Care Administrator  Theater Manager

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES
Activities that describe what I like to do:
☐ Communicate with different types of people
☐ Help others with their homework or to learn new things
☐ Go to school
☐ Direct and plan activities for others
☐ Handle several responsibilities at once
☐ Acquire new information
☐ Help people overcome their challenges

Personal qualities that describe me:
☐ Friendly
☐ Decision maker
☐ Helpful
☐ Innovative/Inquisitive
☐ Good listener

School subjects that I like:
☐ Language Arts
☐ Social Studies
☐ Math
☐ Science
☐ Psychology

PATHWAYS IN THIS CLUSTER
◆ Administration & Administrative Support
◆ Professional Support Services
◆ Teaching/Training

Recommended Courses

McFarland High School Course Offerings

Education and Training
• Parents and Children
• Child Care 1 and 2
• Psychology/AP Psychology
• Sociology
• Communication Arts
• Art
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Aerobic Instructor
Child Care Assistant
Dance Teacher
Library Assistant
Self Enrichment Teacher

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Computer Installation &
Demonstration
Preschool Teacher
Library Technician
Sign Language Interpreter
Teacher Assistant

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Apprenticeship Consultant
Bilingual Educator
Educational Administrator
Instructional Coordinator
Kindergarten Teacher
Music Teacher
Music Therapist
School Psychologist
Secondary School Teacher
Teacher of the Blind
Vocational Education Teacher
Librarian
Speech-Language Pathologist
School Counselor
University Professor
Training Program Manager
Elementary School Teacher
Special Education Teacher
Adult Literacy Teacher

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES

Activities that describe what I like to do:

- Work with numbers
- Work to meet a deadline
- Make predictions based on existing facts
- Have a framework of rules by which to operate
- Analyze financial information and interpret it to others
- Handle money with accuracy and reliability
- Take pride in the way I dress and look

Personal qualities that describe me:

- Trustworthy
- Orderly
- Self-confident
- Logical
- Methodical or efficient

School subjects that I like:

- Accounting
- Math
- Economics
- Banking/Financial Services
- Business Law

PATHWAYS IN THIS CLUSTER

- Accounting
- Banking Services
- Business Finance
- Insurance
- Securities and Investments

Recommended Courses

McFarland High School Course Offerings

Finance

- Personal Finance
- Exploring Business
- Accounting/College Accounting
- Personal and Business Law
- Finance Apprenticeship
- Marketing 1, 2, 3
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Bill & Account Collector
Brokerage Clerk
Cashier

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Accountant
Brokerage Clerk
Claim Adjuster
Financial Institution Manager
Insurance Agent
Investigator & Adjustor
Loan Officer
Personal Property Appraiser

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Accountant, CPA
Actuary
Auditor
Brokerage Clerk
Business & Industry Consultant
Controller
Credit Analyst
Credit Card Operations Manager
Insurance Underwriter
Investment Advisor
Music Store Accountant
School District Business
Manager
Economist
Financial Advisor
Stockbroker
Real Estate Appraiser

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES
Activities that describe what I like to do:
- Be involved in politics.
- Negotiate, defend, and debate ideas and topics.
- Plan activities and work cooperatively with others.
- Work with details.
- Perform a variety of duties that may change often.
- Analyze information and interpret it to others.
- Travel and see things that are new to me.

Personal qualities that describe me:
- Good communicator.
- Competitive.
- Service minded.
- Well organized.
- Problem solver.

School subjects that I like:
- Government.
- Language Arts.
- History.
- Math.
- Foreign Language.

PATHWAYS IN THIS CLUSTER
- Governance.
- National Security.
- Foreign Service.
- Planning.
- Revenue and Taxation.
- Regulation.
- Public Management.

Recommended Courses

McFarland High School Course Offerings

Government and Public Administration
- AP Government.
- Communication Arts.
- International Relations.
- Psychology/AP Psychology.
- Sociology.
- Personal and Business Law.
- Accounting/College Accounting.
- Personal and Business Law.

Executing governmental functions to include governance: national security; foreign service; planning; revenue and taxation; regulation; and management and administration at the local,
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience
Mail Carrier
Postal Clerk
Drivers License Examiner

Mail Handling Machine Operator
License Clerk
Infantry Forces

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience, military

Coroner
City Planning Aid
Building Inspector
Title Examiner
Accountant

Association Executive
Postmaster
Transportation Inspector

Infantry Forces
Special Forces

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Accountant
Apprenticeship Consultant
Aviation Security Specialist
City Manager
Dean of Students
Emergency Mgmt.

Specialist
Equal Opportunity Specialist
Specialist
Infantry Officer
Lawyer
Legislator

Music Administrator
Political Scientist
Special Operations Officer
Urban Planner
Public Utilities Mgr.

Occ. Health & Safety Specialist
Peace Corps Volunteer
Social Services Administrator
Translator/Interpreter

CLUSTER KNOWLEDGE & SKILLS
Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

**INTERESTS & ABILITIES**

Activities that describe what I like to do:
- Work under pressure
- Help sick people and animals
- Make decisions based on logic and information
- Participate in health and science classes
- Respond quickly and calmly in emergencies
- Work as a member of a team
- Follow guidelines precisely and meet strict standards of accuracy

Personal qualities that describe me:
- Compassionate and caring
- Good at following directions
- Conscientious and careful
- Patient
- Good listener

School subjects that I like:
- Biological Sciences
- Chemistry
- Math
- Occupational Health classes
- Language Arts

**PATHWAYS IN THIS CLUSTER**

- Therapeutic Services
- Diagnostic Services
- Health Informatics
- Support Services
- Biotechnology Research and Development

**Recommended Courses**

McFarland High School Course Offerings

Health Science
- Medical Terminology
- Chemistry/AP Chemistry
- Human Anatomy
- Biotechnology
- Parents and Children
- Psychology/AP Psychology
- Health Services Apprenticeship
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Certified Nursing Assistant
Clerk
Food Service Worker
Hospital Admitting

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Emergency Medical Technician
Home Health Aide
Massage Therapist
Physical Therapy Aide
Radiology Technologist
Registered Nurse
Surgical Technician
Translator and Interpreter
Ultrasound Technician
Medical Assistant
Dental Assistant
Dental Hygienist
Dialysis Technician
Occupational Therapy Assistant

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Athletic Trainer
Chiropractor
Dentist
Dietician
Occupational Therapist
Music Therapist
Pharmacist
Primary Care Physician
Psychiatrist
Surgeon
Geneticist
Statistician
Podiatrist
Oral Surgeon
Registered Nurse
Nurse Practitioner
Anesthesiologist
Hemotherapist

CLUSTER KNOWLEDGE & SKILLS
Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other food service, lodging, attractions, and recreation events and travel-related services.

INTERESTS & ABILITIES
Activities that describe what I like to do:
- Investigate new places and activities
- Work with all ages and types of people
- Organize activities in which other people enjoy themselves
- Have a flexible schedule
- Help people make up their minds
- Communicate easily, tactfully, and courteously
- Learn about other cultures

Personal qualities that describe me:
- Tactful
- Self-motivated
- Works well with others
- Outgoing
- Slow to anger

School subjects that I like:
- Language Arts/Speech
- Foreign Language
- Social Sciences
- Marketing
- Food Services

PATHWAYS IN THIS CLUSTER
- Restaurant and Food/Beverage Services
- Lodging
- Travel & Tourism
- Recreation, Amusements & Attractions

Recommended Courses

McFarland High School Course Offerings

Hospitality and Tourism
- Exploring Business
- Marketing 1, 2 and 3
- Accounting/College Accounting
- Food Choices
- World of Foods
- Culinary Careers
- Tourism Apprenticeship
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Baggage Porter & Bellhop
Cake Decorator
Concierge
Day Worker
Food Attendant
Furniture Refinisher

Gaming Change Person & Booth Cashier
Guide
Usher
Wardrobe & Dressing
Room Attendant

Janitor
Hotel Clerk
Waiter/Waitress
Short Order Cook
Restaurant Host/Hostess
Hotel/Motel Cleaner

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Club Manager
Conference Planner
Food Service Supervisor
Household Manager
Motel & Hotel Manager
Recreation Director
Restaurant Manager

Taxidermist
Translator (Interpreter)
Caterer
Concierge
Restaurant Cook/Chef

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Archivist
Coach
Conservation Technician
Curator
Historian

Musicians Agent
Park Ranger
Recreation Director
Resort Manager

Theatre Manager
Translator/Interpreter
Zookeeper

CLUSTER KNOWLEDGE & SKILLS
-Environmental, Leadership & Teamwork, Ethics & Legal Responsibilities, Employability & Career Development, Technical Skills
PREPARING INDIVIDUALS FOR EMPLOYMENT IN CAREER PATHWAYS THAT RELATE TO FAMILIES AND HUMAN NEEDS.

INTERESTS & ABILITIES

Activities that describe what I like to do:
- Care about people, their needs, and their problems
- Participate in community services and/or volunteering
- Listen to other people's viewpoints
- Help people be at their best
- Work with people from preschool age to old age
- Think of new ways to do things
- Make friends with different kinds of people

Personal qualities that describe me:
- Good communicator/good listener
- Caring
- Non-materialistic
- Uses intuition and logic
- Non-judgmental

School subjects that I like:
- Language Arts
- Psychology/Sociology
- Family and Consumer Sciences
- Finance
- Foreign Language

PATHWAYS IN THIS CLUSTER

- Early Childhood Development & Services
- Counseling & Mental Health Services
- Family & Community Services
- Personal Care Services
- Consumer Services

RECOMMENDED COURSES

McFarland High School Course Offerings

Human Services
- Psychology/AP Psychology
- Sociology
- Parents and Children
- Child Care 1 and 2
- Personal and Business Law
**Career Options**

FROM HIGH SCHOOL

*On-the-job training and/or minimal experience*

- Aerobic Instructor
- Crossing Guard
- Household Cook
- Nanny

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE

*Community college, technical college, apprenticeship, experience*

- Community Organization Worker
- Cosmotologist
- Funeral Director
- Institutional Cook
- Nail Technician
- Preschool Teacher
- Shoe Repairer
- Skin Care Specialist

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE

*Colleges/Universities*

- Dietician
- Investment Advisor
- Liturgical Minister
- Clergy
- Music Therapy
- Placement Counselor
- Psychiatrist
- Psychologist
- School Counselor
- Sociologist
- Social Worker
- Vocational Rehab Counselor
- Alcohol & Drug Abuse Counselor
- Career Counselor
- Financial Counselor
- Personal Counselor
- Religious Worker

CLUSTER KNOWLEDGE & SKILLS

Building linkages in IT occupations framework for entry-level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

INTERESTS & ABILITIES

Activities that describe what I like to do:
- Work with computers
- Reason clearly and logically to solve complex problems
- Use machines, techniques, and processes
- Read technical materials and diagrams and solve technical problems
- Adapt to change
- Play video games and figure out how they work
- Concentrate for long periods without being distracted

Personal qualities that describe me:
- Logic/analytical thinker
- See details in the big picture
- Persistent
- Good concentration skills
- Precise and accurate

School subjects that I like:
- Math
- Science
- Computer Tech/Applications
- Communications
- Graphic Design

PATHWAYS IN THIS CLUSTER
- Network Systems
- Information Support & Services
- Web and Digital Communications
- Programming and Software Development

Recommended Courses

McFarland High School Course Offerings

Information Technology
- Advanced Technology
- Web Page Design 2
- Advanced Computers and Multimedia Production
- A+ Computers
- Information Technology Apprenticeship
- Computer Science and Software Engineering
Career Options

FROM HIGH SCHOOL
*On-the-job training and/or minimal experience*

Careers in this field require more than minimal experience or on-the-job training

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
*Community college, technical college, apprenticeship, experience*

- Computer Support Specialist
- Computer Systems Analyst
- Recording Engineer
- Sound Manager
- Tool Programmer
- Webmaster

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
*Colleges/Universities*

- Animator
- Computer Engineer
- Computer Network Coordinator
- Database Administrator
- Illustrator
- Scientific & Engineering Programmer
- Software Engineer
- Webmaster
- Video Game Designer
- Computer Systems Analyst
- Medical & Scientific Illustrator
- Computer Programmer
- Computer Security Specialist
- Information Scientist

CLUSTER KNOWLEDGE & SKILLS

**INTERESTS & ABILITIES**

Activities that describe what I like to do:
- Work under pressure or in the face of danger
- Make decisions based on my own observations
- Interact with other people
- Be in positions of authority
- Respect rules and regulations
- Debate and win arguments
- Observe and analyze people’s behavior

Personal qualities that describe me:
- Adventurous
- Dependable
- Community-minded
- Decisive
- Optimistic

School subjects that I like:
- Language Arts
- Psychology/Sociology
- Government/History
- Law Enforcement
- First Aid/First Responder

**PATHWAYS IN THIS CLUSTER**
- Correction Services
- Emergency & Fire Management Services
- Security & Protective Services
- Law Enforcement Services
- Legal Services

---

**Recommended Courses**

McFarland High School Course Offerings

- Law, Public Safety, Corrections and Security
  - AP Government
  - Psychology/AP Psychology
  - Sociology
  - Personal and Business Law
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

- Correctional Officer
- Crossing Guard
- Dispatcher
- Parking Enforcement Officer
- Security Guard

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

- Bailiff
- Copyright Law
- Court Reporter
- Emergency Medical Technician
- Firefighter
- Legal Secretary
- Musician Law
- Paralegal Assistant
- Park Ranger
- Police Officer
- Fire Inspector
- Police Canine Trainer

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

- Adjudicator
- Arbitrator
- FBI Agent
- Forensic Science Technician
- Judge
- Judicial Law Clerk
- Lawyer
- Park Ranger
- Probation and Parole Officer
- Fingerprint Examiner
- Correctional Officer Supervisor
- Emergency Management Specialist
- Private Detective
- State Patrol Officer
- Police Officer
- Conservation Warden
- Forensic Science Technician

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES
Activities that describe what I like to do:
- Work with my hands and learn that way
- Put things together
- Do routine, organized and accurate work
- Perform activities that produce tangible results
- Apply math to work out solutions
- Use hand and power tools and operate equipment/machinery
- Visualize objects in three dimensions from flat drawings

Personal qualities that describe me:
- Practical
- Observant
- Physically active
- Step-by-step thinker
- Coordinated

School subjects that I like:
- Math-Geometry
- Chemistry
- Trade and Industry courses
- Physics
- Language Arts

PATHWAYS IN THIS CLUSTER
- Production
- Manufacturing Production Process Development
- Maintenance, Installation & Repair
- Quality Assurance
- Logistics & Inventory Control
- Health, Safety & Environmental Assurance

Recommended Courses
McFarland High School Course Offerings
Manufacturing
- A+ Computers
- Introduction to Engineering (offered 2015-16)
- Principles of Engineering (offered 2016-17)
- Digital Electronics (offered 2015-16)
- Introduction to Technology
- Woods 1, 2, and 3
- Metals 1, 2, and 3
- Construction skills
- Building Trades
- Air Cooled Engines

Welding Apprenticeship
Manufacturing Apprenticeship
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Apparel & Home Furnishings
  Dyer
Brush Painter
Engraver
Hand Worker

Oil Well Driller
Order Filler
Production and Planning Clerk

Production Assembler
Tire Builder

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Apparel Pattern Maker
Combination Welder
Computer Technician
Electrical Appliance Servicer
Electric Motor Technician

Locksmith
Musical Instrument Repairer
Quality Control Technician
Tool and Die Maker
Machinist

Technician
Electrical Engineer
Industrial Engineering

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Communications Operations Mgr
Electrical Engineer
Electronic Engineer
Engineering Manager
Environmental Engineer
Industrial Engineer

Mechanical Engineer
Musical Instrument Design
Occupational Health & Safety Inspector
Production Supervisor
Stage & Sound

Equipment Mfg.

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES
Activities that describe what I like to do:
- Shop and go to the mall
- Be in charge
- Make displays and promote ideas
- Give presentations and enjoy public speaking
- Persuade people to buy products or to participate in activities
- Communicate my ideas to other people
- Take advantage of opportunities to make extra money

Personal qualities that describe me:
- Enthusiastic
- Competitive
- Creative
- Self-motivated
- Persuasive

School subjects that I like:
- Language Arts
- Math
- Business Education/Marketing
- Economics
- Computer Applications

PATHWAYS IN THIS CLUSTER
- Marketing Communications
- Marketing Management
- Marketing Research
- Merchandising
- Professional Selling

Recommended Courses

McFarland High School Course Offerings
Marketing, Sales and Service
- Marketing 1, 2, and 3
- Retail Marketing
- Entrepreneurship
- Graphic Design
- Exploring Business
- Adv. Technology
Computer Science and Software Engineering
- Art 1, 2, and 3
- Communication Arts
- Creative Writing
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Antique/Collections Dealer
Cashier
Classified Ad Clerk

Counter Clerk
Customer Service Representative
News Vendor

Street Vendor
Telemarketer
Wedding Planner

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Advertising Layout Designer
Advertising Sales Representative
Auctioneer

Auto Salesperson
Buyer
Instrument Sales

Real Estate Agent

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Advertising Account Executive
Advertising Manager
Business Agent
Marketing Manager

Public Relations Manager
Purchasing Agent
Research Analyst
Public Relations Practitioner

Insurance Agent
Purchasing Manager
Market Research Analyst
Real Estate Broker

CLUSTER KNOWLEDGE & SKILLS
Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering), including laboratory and testing services, and research and development.

**INTERESTS & ABILITIES**

Activities that describe what I like to do:

- Interpret formulas
- Find answers to questions
- Work in a laboratory
- Figure out how things work and investigate new things
- Explore new technology
- Experiment to find the best way to do something
- Pay attention to details and help things be precise

Personal qualities that describe me:

- Detail oriented
- Inquisitive
- Objective
- Methodical
- Mechanically inclined

School subjects that I like:

- Math
- Science
- Drafting/Computer Aided Drafting
- Electronics/Computer Networking
- Technical Classes/Technology Education

**PATHWAYS IN THIS CLUSTER**

- Engineering & Technology
- Science & Math

---

**Recommended Courses**

McFarland High School Course Offerings

Science, Technology, Engineering and Mathematics

- Introduction to Technology
- Introduction to Engineering (offered 2015-16)
- Principles of Engineering (offered 2016-17)
- Engineering Design and Development (offered 2016-17)
- Digital Electronics (offered 2015-16)
- Chemistry/AP Chemistry
- Physics/AP Physics
- AP Calculus
- Programming 2
- Biotech

---

Computer Science and Software Biotechnology Apprenticeship
Career Options

FROM HIGH SCHOOL
On-the-job training and/or minimal experience

Statistical Clerk

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
Community college, technical college, apprenticeship, experience

Biological Technician
Chemical Technician
Civil Engineering Technician
Environmental Technician
Mathematical Technician
Industrial Engineering Technician
Veterinary Technician

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
Colleges/Universities

Aerospace Engineer
Anthropologist
Archaeologist
Astronomer
Biomedical Engineer
Chemical Engineer
Civil Engineer
Computer Engineer
Electrical Engineer
Geologist
Industrial Engineer
Mathematician
Mechanical Engineer
Metallurgist
Mining Engineer
Nuclear Engineer
Physicist
Solar Engineer
Statistician

CLUSTER KNOWLEDGE & SKILLS
INTERESTS & ABILITIES
Activities that describe what I like to do:
- Travel
- See well and have quick reflexes
- Solve mechanical problems
- Design efficient processes
- Anticipate needs and prepare to meet them
- Drive or ride
- Move things from one place to another

Personal qualities that describe me:
- Realistic
- Mechanical
- Coordinated
- Observant
- Planner

School subjects that I like:
- Math
- Trade and Industry courses
- Physical Sciences
- Economics
- Foreign Language

PATHWAYS IN THIS CLUSTER
- Transportation Operations
- Logistics Planning & Management Services
- Warehousing & Distribution Center Operations
- Facility & Mobile Equipment Maintenance
- Transportation Systems/Infrastructure Planning, Management & Regulation
- Sales & Service

Recommended Courses

McFarland High School Course Offerings
Transportation, Distribution and Logistics
- Introduction to Technology
- Air Cooled Engines
- Basic Automotive
- Automotive Technology
- Automotive Service
- Digital Electronics (offered 2015-16)
- Programming 2
- Automotive Technology Apprenticeship
- Computer Science Software Engineering PLTW
Career Options

FROM HIGH SCHOOL
*On-the-job training and/or minimal experience*

- Bus Driver
- Deckhand
- Delivery Driver
- Highway Maintenance Worker
- Reservation and Ticket Clerk
- Service Station Attendant

Shipping and Receiving Clerk
Traffic Clerk
Taxicab Driver
Light Truck Driver

CAREERS WITH CERTIFICATION/ASSOCIATE DEGREE
*Community college, technical college, apprenticeship, experience*

- Aircraft Mechanic
- Auto Body Technician
- Automobile Painter
- Cartographic Technician
- Diesel Technician
- Motorcycle Technician

- Railroad Conductor
- Security Consultant
- Travel Agent
- Flight Attendant

BACHELORS, Pre-PROFESSIONAL or HIGHER DEGREE
*Colleges/Universities*

- Airline Pilot
- Air Traffic Controller
- Astronaut
- Environmentalist
- Locomotive Engineer

- Mechanical Engineer
- Mining Manager
- Public Health Sanitarian
- Travel Agency Manager

CLUSTER KNOWLEDGE & SKILLS

SOME THINGS TO CONSIDER WHEN REGISTERING FOR CLASSES

Course registration is an extremely important process that parents and students should actively participate in. This is an excellent time for parents to sit down and discuss post-high school goals and plans with their child. Some things to consider:

• Call the department chair and/or teacher if you have questions about a specific course.

• MHS offers many diverse opportunities for students, both within our traditional curriculum and outside of it. Some of the unique opportunities and their contact person are:

  • **Advanced Placement (AP) Courses**: Ms. Guenther (ext. 4531) or Ms. Gerlach (ext. 4540).
  
  • **Youth Options**: Juniors and seniors may take courses at MATC, UW-Madison or other two- or four-year colleges nearby. Contact Ms. Guenther (ext. 4531) or Ms. Gerlach (ext. 4540).
  
  • **Youth Apprenticeship and Certified Skills Programs**: Juniors and seniors may enroll in apprenticeship programs that include: biotechnology, health services, and financial services to name a few. Students enrolled get instruction in their respective field of study, as well as take classes at MHS. Contact Mrs. Brady (ext. 4709).
  
  • **Cooperative Educational Programs**: Students may participate in cooperative educational programs in Marketing (Ms. Verhulst, ext. 4569), Child Care Services (Ms. LaPlante, ext. 4535) and Construction Trades (Mr. Ray, ext. 4986).

• Preparation for American College Test (ACT): ACT notes that those students who enrolled in a core curriculum performed better on their ACT than those students who didn’t. Please see *Preparing for the American College Test* on page 8 of this booklet.

• Four-year college is not for everyone: There are many educational and career opportunities for students at Wisconsin’s two-year technical colleges and the military service. Contact Ms. Guenther (ext. 4531) or Ms. Gerlach (ext. 4540) for more information.
MHS GRADUATION REQUIREMENTS

Required credits include:

- **English**............................................................................................... 4 credits
  (English 9 and English 10 are required)
- **Social Studies**...................................................................................... 3 credits
  (U.S. History 9, World History, Economics & Political Science)
- **Mathematics**......................................................................................... 3 credits
  (Algebra 1, Geometry and Algebra 2 are recommended)
- **Science**................................................................................................. 3 credits

| Science - 3 Credits effective with the class of 2017 - Physical Science, Biology and 1 Science elective |
| Science- 2018 and beyond- Biology or Advanced Biology required freshman year and then \( \frac{1}{2} \) Chemistry and \( \frac{1}{2} \) Physics and 1 credit elective |

- **Physical Education**............................................................................... 2 credits
  (if student completes three successful sports seasons by end of junior year, they can opt out of a gym class their junior or senior year)
- **Career /Technical Education, (CT/E)**............................................... 1 credit
  (The CT/E requirement can be satisfied by taking courses in these departments: Business Education, Computer Studies, Family and Consumer Education, Marketing Education, Technology & Engineering)
- **Fine Arts**............................................................................................... 1 credit
  (Art, Band, Chorus, Fifth year of English Third year of Foreign Language)
- **Computer Applications 1**................................................................. 1/2 credit
- **Health**................................................................................................. 1/2 credit
- **Electives**............................................................................................... 8 credits

**Total credit requirement**........................................................................ 26 credits

*Starting with June 2017 graduates, students will need to pass a state-mandated civics exam. The exam will be administered when students are in their junior year.

*All seniors will be required to complete a Senior Exit Interview/Portfolio (SEI/P).

When students are scheduling classes, the students are responsible for scheduling classes that equal at least seven credits each year. Select courses seriously and with a purpose. Work to learn and achieve the best grades possible. Good courses, grades and attendance become your first credential. A good credential may help you obtain your first job or enter the school of your choice. Balance your academic work with appropriate extra co-curricular activities. Be proud of your first credential!
PROGRAM CHANGE AND DROPPING SUBJECTS:
Students and parents should carefully consider post-secondary plans and make certain that the courses selected meet the long-term needs of the student.
Students should assume that the courses selected will be scheduled and should not expect to make changes at a later time.
Guidance Counselors will notify students of courses that were selected that will not be offered due to low enrollment or budget constraints. Staffing and budgeting decisions for the following school year are made based on the courses selected by students. Also, the master schedule is developed to accommodate as many students as possible and ensure class sizes are balanced.
Schedules should be reviewed during the summer for errors. Guidance counselors will have hours available in August for corrections. Schedules may be adjusted at the end of the year and during summer.

Changing Schedules:
Any student wishing to request a schedule change must do so by completing the form available in the Guidance Office. The form must be completed and returned by the dates indicated. Forms will be reviewed by the school counselors and administration. Your school counselor will contact you shortly thereafter to let you know the outcome of your request. The criteria for schedule changes are as follows:
- Graduation requirement (12th only)
- College admission requirement (11th & 12th only)
- Career Planning/Pathways Requirement (10th-12th only)
- Failure/repeat a class (10th-12th only)
- Pre-requisite- do not meet course requirements (9th-12th)
- Course selection form error (your original course selection form will be checked for verification)
- Lunch- medical need (note: documentation from doctor of record must be attached to the request form)
- Irresolvable conflict with teacher in previous school year (9-12); please note that this must have been documented with your counselor & a plan for Academic Assistance put into place)

Guidelines for Schedule Changes:
1. You can drop and/or add a class during the first 10 days of the semester. To drop/add a class it would have to follow these steps.
   a. Stop by guidance office and pick up a rationale form
   b. Fill out form and have parent sign
   c. Return the form to the guidance office
   d. Guidance office reviews rationale form and calls student in to give them the decision
2. After the ten days you can only drop a course for a study hall—you can do this through the first six weeks
   a. Follow the same steps as above
3. After the first six weeks of the semester you can only drop a course with an F. This will be recorded on your transcript.
It shall be the policy of the School District to evaluate student achievement in grades Kindergarten through 12. The issuance of grades on a regular basis serves to:

1. Promote a process of continuous evaluation of student performance.
2. Inform the student and his/her parent(s) or guardian of the student's progress.
3. Provide a basis for bringing about change in student performance if such change is deemed necessary.

Grading procedures for the District shall be developed by the building principal, in cooperation with the teaching staff. When developing grading procedures, consideration shall be given to the following:

1. Grading criteria should be reasonably uniform by grade level or subject. Letter grades shall be reported on a 4.25 point system at the high school level with the exception of weighted grade classes. The following grade scale is issued at McFarland High School.

The regular class grading scale is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.25</td>
</tr>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.75</td>
</tr>
<tr>
<td>B+</td>
<td>3.25</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.75</td>
</tr>
<tr>
<td>C+</td>
<td>2.25</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.75</td>
</tr>
<tr>
<td>D+</td>
<td>1.25</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>.75</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>ME**</td>
<td></td>
</tr>
<tr>
<td>P**</td>
<td></td>
</tr>
<tr>
<td>WF***</td>
<td></td>
</tr>
</tbody>
</table>

Students enrolled in AP classes hosted by McFarland High School will receive weighted grades for AP classes. Refer to course descriptions to verify whether or not a course is evaluated on the weighted grade scale.

Courses that are graded on the Weighted Grade Scale are so noted in the course description. The weighted grading scale for Advanced Placement classes is as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>5.25</td>
</tr>
<tr>
<td>A</td>
<td>5.00</td>
</tr>
<tr>
<td>A-</td>
<td>4.75</td>
</tr>
<tr>
<td>B+</td>
<td>4.25</td>
</tr>
<tr>
<td>B</td>
<td>4.00</td>
</tr>
<tr>
<td>B-</td>
<td>3.75</td>
</tr>
<tr>
<td>C+</td>
<td>3.25</td>
</tr>
<tr>
<td>C</td>
<td>3.00</td>
</tr>
<tr>
<td>C-</td>
<td>2.75</td>
</tr>
<tr>
<td>D+</td>
<td>2.25</td>
</tr>
<tr>
<td>D</td>
<td>2.00</td>
</tr>
<tr>
<td>D-</td>
<td>1.75</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>ME*</td>
<td></td>
</tr>
<tr>
<td>P**</td>
<td></td>
</tr>
<tr>
<td>WF***</td>
<td></td>
</tr>
</tbody>
</table>

*ME = Medically Excused. Not computed for class rank and GPA
**Pass = Not computed for class rank and GPA. With instructor approval, student may elect to take a course pass/fail unless the course is a prerequisite for another course or graduation requirement.
***WF = Withdrawal from class with failing grade.

2. Grading procedures must be related to the objectives of the grade level or subject.

3. Each teacher's grading criteria should reflect multiple measures such as class participation, daily assignments, quizzes, special projects and tests.

4. Students and their parents/guardians should be informed of the grading criteria for each grade level or subject so they will know what the expectations are as they relate to student progress.
Honor Roll

The following two honor rolls are posted at the end of each term:

- Honor Roll = 3.0 - 3.749
- High Honor Roll = 3.75 - 5.25

Selection of Wisconsin Academic Excellence Higher Education Scholarship Recipient

Selection of the Wisconsin Academic Excellent High Education Scholarship (WAEHES) is based on the following:

1. The student with the highest GPA, calculated to three places beyond the decimal at the end of the first semester of his/her senior year, [7th term] will be identified to receive the State of Wisconsin Academic Excellence Higher Education Scholarship. The number of McFarland students designated to receive WAEHES shall be determined by the state.

2. To be eligible to be considered for the scholarship, a student must:
   - Be at McFarland High School in the 12th grade and have achieved the number of credits necessary to complete graduation requirements.
   - Have been a full-time student at McFarland High School for the last 3 consecutive terms prior to naming of the nominee.
   - Must be enrolled as a full-time student at McFarland High School (courses taken on an audit basis don’t count toward this requirement.)

3. The GPA will be calculated using all classes taken for letter grades at McFarland high School. Pass/fail and medically excused courses will not be included to calculate GPA.

4. Courses graded as incomplete at the end of the grading period prior to scholarship nomination will be graded as failing if not completed within 10 school days after the grading period ends unless prior approval is granted by the guidance office for extenuating circumstances.

5. If a tie exists for the designation of academic scholar for purposes of the Wisconsin Academic Excellence Higher Education Scholarship, the high school faculty shall use the following criteria to break the tie to name the scholar(s) and prioritize the remaining students as alternates:

   A. The student with the highest score on the American College Test (ACT) by the end of the 14th term shall be named the scholar. If any of the students involved have taken the exam more than once, the highest composite score received, prior to the end of the 14th term, will be used.

   B. If a tie continues to exist, the student with the greatest number of GPA calculated credits earned through 14 terms shall be named the scholar.

   C. If a tie continues to exist, it shall be broken by a chance drawing of names by the Board of Education with the first name drawn being named the scholar and the remaining names drawn to prioritize the alternates.
Academic Recognition

Academic awards will be awarded to students who consistently achieve high per term success in all classes. Students earn two points by achieving honor roll (3.0—3.749 GPA) and four points for achieving high honor roll (3.75—5.25 GPA) per term. Accumulated points earn the following recognition:

- 8 points = Academic Certificate
- 12 points = Academic Letter
- 20 points = Academic Medallion
- 28 points = Academic Plaque

PREPARING FOR THE AMERICAN COLLEGE TEST (ACT)

(What Parents and Students Should Know Regarding ACT Scores)

ACT test scores are of importance to students and parents. ACT studies have indicated the following relative to preparation:

ACT researchers have long known that taking a core curriculum typically boosts students' ACT scores. Researchers looked at specific sequences of courses students take to see how each of these different, college-preparatory pathways correlates with ACT scores.

Their findings confirm the close relationship between coursework and performance on the ACT. As expected, students taking a minimal core curriculum in mathematics (algebra 1, algebra 2, and geometry) did better than those who didn't. But for each additional academic course taken, the researchers found that average ACT scores rose dramatically. Students who took trigonometry scored an average of 2.7 points higher on their ACT Math test than those who took the minimal core sequences. Students who added calculus on top of trigonometry showed an even greater increase 7.0 points over those who took only algebra 1, algebra 2 and geometry.

A similar pattern is evident for the sciences. Students who reported taking a core science sequence—general science, biology, and chemistry—outperformed those who took a non-core curriculum by an average of 1.4 points on the Science Reasoning test. Students who added a physics course to the basic core sequence earned an additional 2.5 points. A similar pattern, though less dramatic, also held for English and the social sciences.

This new information demonstrates quite clearly that the courses students elect to take can have a major impact on their ACT scores.
ADMISSION REQUIREMENTS FOR UNIVERSITY OF WISCONSIN SYSTEMS

Each campus in the University of Wisconsin System has its own admission standards. Web addresses are listed below. Students should check the website of the college of their choice for admissions standards. All students should be aware of the fact that everyone will be required to take the ACT test prior to being accepted at any of the colleges in the University system. Students are encouraged to take the ACT test in the spring of their junior year.

NCAA Initial Eligibility Clearinghouse
McFarland High School students who plan to participate in NCAA intercollegiate sports should be aware that they must submit their course work, grades and test scores to the NCAA’s Initial Eligibility Clearinghouse. The designation of NCAA Clearinghouse Approved indicates this course meets the criteria established by the NCAA Initial Eligibility Clearinghouse for an acceptable Core Course. Courses without this designation do not meet the core criteria.

www.uwhelp.wisconsin.edu
This site contains information on the institutions in the University of Wisconsin System including 13 universities, 13 freshman-sophomore Colleges and UW-Extension. The information is provided for you and your family by the Higher Education Location Program (UW HELP) and all campuses of the UW System.

UW-ECU CLAIRE
UW-SUPERIOR
http://www.uwec.edu/
https://www.uwsuper.edu/index.cfm

UW-RIVER FALLS
UW-MILWAUKEE
http://www.uwrf.edu/
http://www4.uwm.edu/admission/new-freshmen.cfm

UW-GREEN BAY
UW-WHITEWATER
http://www.uwgb.edu/
http://www.uww.edu/

UW-STEVEN'S POINT
UW-OSHKOSH
https://www.uwsp.edu/Pages/default.aspx
http://www.uwosh.edu/

UW-LA CROSSE
UW-PARKSIDE
https://www.uwlax.edu/future-students/
https://www.uwp.edu/

UW-STOUT
UW-PLATTEVILLE
http://www.uwstout.edu/
https://www.uwplatt.edu/

UW-MADISON

MADISON COLLEGE
www.admissions.wisc.edu
www.madisoncollege.edu

PRIVATE COLLEGES
http://www.wisconsinsprivatecolleges.org/
EXTENDED EDUCATIONAL OPPORTUNITIES AT MCFARLAND HIGH SCHOOL

McFarland High School offers students the following educational opportunities:

A. Work-Based Learning
B. Youth Options
C. Certification and Advanced Standing at MATC
D. Gifted and Talented
E. Acceleration

Work-Based Learning

Youth Apprenticeship and Certified Skills Program:
- 2 Year Programs -- junior & senior year
- High School Credit and College Credit/Advanced Standing
- Certificate of Occupational Proficiency
- Related Instruction with other Dane County Students

Youth Apprenticeship Program Areas:
- Biotechnology
- Automotive Technology
- Certified Construction Skills
- Financial Services
- Tourism
- Architecture
- Printing
- Manufacturing (Plastics)
- Production Agriculture
- Health Services
- Information Technology

Certified Construction Skills (Junior year instruction @ MHS)
Contact: Cindy Brady @ 838-4500 X 4709

Cooperative Education Programs:
- 1 Year Programs
- High School Credit & College Advanced Standing
- State Skills Standards Certificate - in Marketing
- Related Instruction with McFarland Technical Education & Career:
  Marketing Contact: Ginger Verhulst 838-4569
  Construction Trades Contact: Travis Ray 838-4500 X 4986

Work Experience Programs for High School Credit (1/2 to 1 year):
- Family & Consumer Related: Jazmin LaPlante 838-4535
- Employability Skills Related: Ginger Verhulst 838-4500 X 4771
- Career Related Internships: Cindy Brady 838-4500 X 4709
- Transition Focus: Lauren Arango 838-4500 X 4729

Job Shadow-1/2 day per year
Contact: Cindy Brady 838-4500 X 4709
Youth Options

Wisconsin's youth options program allows public high school juniors and seniors who meet certain requirements to take postsecondary courses at a UW institution, a Wisconsin technical college, one of the state's participating private nonprofit institutions of higher education, or tribally-controlled colleges. Approved courses count toward high school graduation and college credit.

The program opens the door to greater learning opportunities for motivated students considering a technical career, wishing to begin college early, or preparing themselves to enter the workforce immediately after high school graduation.

Under youth options, a student does not pay for a college course if the school board determines the course qualifies for high school credit and is not comparable to a course already offered in the school district. If approved by the school board, the student can receive both high school and college credit upon successful completion of the course. A student who successfully completes their high school graduation requirements earns a high school diploma regardless of whether the requirements were met while attending a high school or college.

Youth Options Program
Information for Students and Parents
Wisconsin Department of Public Instruction
Tony Evers, State Superintendent


If a student drops or fails a course taken through Youth Options, the student is responsible for reimbursing the school district for the cost of the course.

For further information contact Cindy Brady @ 838-4500 ext. 4709 or Jackie Guenther @ 838-4531. The application packet is available in the Guidance Office.
Certification and Advanced Standing at MATC

McFarland High School and Madison Area Technical College (MATC) have a certification/advanced standing agreement for the following courses:

<table>
<thead>
<tr>
<th>Staff Member</th>
<th>McFarland Course(s)</th>
<th>MATC Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travis Ray</td>
<td>Air Cooled Engines</td>
<td>Minor Repair (404-340)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Basic Auto Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbara Schuetz</td>
<td>Accounting 1 &amp; College Accounting</td>
<td>Accounting I Principles (101 - 111)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Computer Applications 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Students should check with the teachers of these classes so you understand how you may obtain advanced standing and credit at MATC based on successful achievement in the listed courses.

Gifted and Talented

McFarland’s Gifted and Talented Services Staff provides assistance to identified high school students through high school and college plan development and student seminars. They assist in developing independent studies, accessing distance learning options and enrichment opportunities, and other individual modifications deemed necessary. MHS also offers Advanced Placement Courses (see below), Youth Options (see page 16) and APEX online courses (see page 18).

For more information, parents and students may contact Mrs. Mary Donagan, High School Resource Teacher for the Gifted and Talented at Ext. 4537; or Kitty Ver Kuilen, District Coordinator of Gifted Services at Ext. 5449. General information is available on the program website at http://www.mcfarland.k12.wi.us/families/AdvLearner.cfm

Acceleration

Parents and students who have questions regarding acceleration should contact their Guidance Counselor.

School District of McFarland
Student Acceleration Procedure K-12

The School District of McFarland recognizes the need for educational alternatives for students. This recognition includes consideration of the fact that some students may be candidates for acceleration through an individual course or full grade because they are able to demonstrate advanced proficiency in the subject matter.

Accelerative options can be divided into two categories:

1. Enabling students to study advanced materials earlier than usual (early entrance to any level of schooling, full grade acceleration (grade skipping), concurrent enrollment in two levels of schooling simultaneously, credit by examination, extracurricular programs

2. Curriculum compacting or compression of curriculum into shorter periods of time (telescoping in which two years of study are compacted into one year) or fast-paced classes. The following document presents district policy and formal procedures that will be used to address student acceleration. Acceleration decisions are made on an individual basis and are the responsibility of the building principal, guidance counselor(s), classroom teacher(s), and Gifted and Talented staff. Parents and students are an integral part of the acceleration process. (Center for Talent Development)
Accelerations in the McFarland School District will be coordinated through the building CARE Teams.

1. Any staff person or parent may make a written request as follows:
   - Staff making a request will submit a CARE referral to the CARE Team. Parents must be notified.
   - Parent(s)/guardian(s) making a request should submit a letter to the Building Administrator for consideration of a student for academic course/grade acceleration. With this request, the Building Administrator initiates a CARE referral.

2. The CARE Team will consist of a combination of the following individuals.
   - Building Administrator
   - Pertinent teachers (former, current, resource, special education, etc.)
   - Teacher(s) of course/grade to be skipped
   - Receiving teacher/department
   - Counselor
   - Psychologist
   - Gifted and talented program personnel

The CARE Team will review the request and if appropriate, will appoint an evaluation team that will include some of the above individuals.

Parent(s)/guardian(s) must give written permission to conduct an evaluation for possible acceleration.

3. The evaluation team will conduct a comprehensive evaluation of the student to determine intellectual functioning, academic skill levels, and social-emotional adjustment. Specific assessment data will be determined according to subject/grade in consideration and may include the following:
   - Achievement test data
   - Midwest Talent Search scores at the MS/HS level, if available
   - Demonstrated academic excellence in prior course work
   - Demonstrated successful participation in a comparable program outside of the district (summer programs at the university, etc.)
   - Teacher and/or mentor recommendations (See Teacher Recommendation forms - two or more recommendations suggested)
   - Successful completion (80%) on representative course assessments, such as unit tests or tests devised by high school academic departments. The student may prepare for such exams with appropriate materials for the course in consideration. Academic subject assessments should be equivalent to what other students in the course should know.
   - Assessments of intellectual and emotional functioning and Iowa Acceleration Scale data when considering full-grade acceleration.

4. Once data have been collected, the CARE Team will reconvene to complete the criteria chart and to discuss the evaluation team's findings. Based on the information and input provided from these sources, the CARE Team will make a recommendation to the Building Administrator. The final decision will rest with the Building Administrator. Parents/students may appeal the decision to the District Administrator and School Board.

5. A decision for acceleration may be made conditionally upon fulfillment of a plan for any supplemental activities considered necessary to make the transition successful. The building-level CARE Team will create a written transition plan.
6. The student’s parent(s)/guardian(s) will have an opportunity for a meeting with the Building Administrator and representatives from the evaluation team.

July, 2009

Middle School Enrollment in MHS Courses

The following guidelines apply whenever a student enrolled at Indian Mound Middle School (IMMS) is enrolled in an out-of-level course at McFarland High School (MHS), where out-of-level is defined as a course or standardized assessment that is taken before the typical grade-level path. The intent and expectation is that middle school students approved for acceleration have the skills, stamina, and support necessary to be successful at McFarland High School.

Middle school students may enroll in an out-of-level course at McFarland High School if they have met the following requirements.

1) Completion and submission of the Application for Out-of-Level Placement to the IMMS Guidance Department.

2) A recommendation for acceleration from the IMMS CARE Team. This recommendation is based on the approval of a request from the student’s subject area teacher and the IMMS Gifted/Talented Resource Teacher that the student be considered for acceleration in a particular subject area in keeping with the McFarland Student Acceleration Procedure. Parents/guardians are to be involved as required by the Procedure.

Prior to enrollment in the high school course, the IMMS Guidance Department will notify the student and family that the student’s final grade for the high school course will be counted toward his/her high school credit requirements and his/her high school grade point average (GPA).

- Parents/guardians and students must sign a form acknowledging that unless the student drops the course within the required two-week window, the student’s grade will be counted toward the student’s high school credit requirements and will be reflected on the student’s transcript.
- A copy of the signed form will be sent to the MHS Guidance Department for the student’s cumulative file.

A middle school student enrolled in a high school course will have a two-week window at the beginning of the term in which to drop the course. The MHS Schedule Drop/Add Form must be submitted to the MHS Guidance Department by 3pm on the Friday of the second week of the term. The student is advised to keep a copy of the completed drop form. On the Monday following the Friday of the second week, the student’s final grade will stand and be reflected on his/her transcript.

The IMMS GT Resource Teacher and the student’s IMMS Guidance Counselor are jointly responsible for regular conversations with the student to assess his/her progress in the course. If it is not working out, the GT Resource Teacher, the IMMS Guidance Counselor, and the student/family will identify an appropriate option at IMMS.

December, 2013
ADVANCED PLACEMENT COURSES

The following Advancement Placement (AP) courses are offered at McFarland High School:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5101, MA5102</td>
<td>AP Calculus AB</td>
<td>Math</td>
</tr>
<tr>
<td>MA5201, MA5202</td>
<td>AP Calculus BC</td>
<td>Math</td>
</tr>
<tr>
<td>EN3801, EN3802</td>
<td>AP Composition</td>
<td>English</td>
</tr>
<tr>
<td>EN3460, EN3461</td>
<td>AP Literature</td>
<td>English</td>
</tr>
<tr>
<td>SC5001, SC5002,</td>
<td>AP Physics B</td>
<td>Science</td>
</tr>
<tr>
<td>SC5005, SC5006</td>
<td>AP Chemistry</td>
<td>Science</td>
</tr>
<tr>
<td>SC5007, SC5008</td>
<td>AP Biology</td>
<td>Science</td>
</tr>
<tr>
<td>SS5100, SS5110</td>
<td>AP Psychology</td>
<td>Social Studies</td>
</tr>
<tr>
<td>SS5300, SS5301</td>
<td>AP European History</td>
<td>Social Studies</td>
</tr>
<tr>
<td>SS5201 &amp; SS5202</td>
<td>AP U.S. History</td>
<td>Social Studies</td>
</tr>
<tr>
<td>SS5000</td>
<td>AP U.S. Government</td>
<td>Social Studies</td>
</tr>
<tr>
<td>SS3014, SS3015</td>
<td>AP Economics</td>
<td>Social Studies</td>
</tr>
</tbody>
</table>

For more information and a complete course description on these AP courses see the respective department, or Ms. Guenther (838-4531) or Ms. Gerlach (838-4540).
McFarland High School students have the opportunity to enroll in on-line classes through our partner school, Aventa Learning. Below is a list of high school courses that are offered on-line through Aventa Online Learning. Students must contact Ms. Janice Gerlach (838-4540) or Ms. Guenther (838-4531) to set up a meeting between the student, counselor, and parents to begin the enrollment process. The Aventa course guide can be found at


**Aventa Learning course list**

<table>
<thead>
<tr>
<th>AP COURSES</th>
<th>MATH</th>
<th>German I, II, III</th>
<th>Personal Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Art History</td>
<td>Pre-Algebra</td>
<td>German IV</td>
<td>Physical Education</td>
</tr>
<tr>
<td>AP Biology</td>
<td>Algebra I</td>
<td>Japanese I &amp; II</td>
<td>Psychology</td>
</tr>
<tr>
<td>AP Calculus AB</td>
<td>Geometry</td>
<td>Latin I</td>
<td>Sociology</td>
</tr>
<tr>
<td>AP Chemistry</td>
<td>Algebra II</td>
<td>Latin II</td>
<td>FOUNDATIONS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Credit Recovery)</td>
</tr>
<tr>
<td>AP Computer Science A</td>
<td>Trigonometry</td>
<td>Mandarin (Chinese) I</td>
<td>Algebra I</td>
</tr>
<tr>
<td>AP English Language</td>
<td>Pre-Calculus</td>
<td>Mandarin (Chinese) II</td>
<td>American History</td>
</tr>
<tr>
<td>AP English Literature</td>
<td>Calculus</td>
<td>Spanish I, II,&amp; III</td>
<td>Biology</td>
</tr>
<tr>
<td>AP Environ. Science</td>
<td>Consumer Math</td>
<td>Spanish IV</td>
<td>Earth Science</td>
</tr>
<tr>
<td>AP European History</td>
<td>Integrated Math</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AP French Language</td>
<td>SCIENCE</td>
<td>Computer Fundamental</td>
<td>English II</td>
</tr>
<tr>
<td>AP Macroeconomics</td>
<td>Physical Science</td>
<td>Digital Photography</td>
<td>English III</td>
</tr>
<tr>
<td>AP Microeconomics</td>
<td>Earth Science</td>
<td>Digital Video Produc.</td>
<td>English IV</td>
</tr>
<tr>
<td>AP Physics B</td>
<td>Biology</td>
<td>Flash Animation</td>
<td>Geography</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>Chemistry</td>
<td>Game Design</td>
<td>Geometry</td>
</tr>
<tr>
<td>AP Spanish Language</td>
<td>Physics</td>
<td>Java Programming</td>
<td>Health</td>
</tr>
<tr>
<td>AP Statistics</td>
<td>Environmental Science</td>
<td>VB.Net Programming</td>
<td>Physical Science</td>
</tr>
<tr>
<td>AP US Government</td>
<td>SOCIAL STUDIES</td>
<td>Web Design</td>
<td>World History</td>
</tr>
<tr>
<td>AP US History</td>
<td>Geography</td>
<td>ELECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LANGUAGE ARTS</td>
<td>World History</td>
<td></td>
<td>Accounting</td>
</tr>
<tr>
<td>Grammar &amp; Comp.</td>
<td>American History</td>
<td>Art Appreciation</td>
<td></td>
</tr>
<tr>
<td>English I</td>
<td>American Government</td>
<td>Career Planning</td>
<td></td>
</tr>
<tr>
<td>English II</td>
<td>Civics</td>
<td>Driver’s Education</td>
<td></td>
</tr>
<tr>
<td>English III</td>
<td>Economics</td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>English IV</td>
<td>WORLD LANGUAGE</td>
<td>Life Skills</td>
<td></td>
</tr>
<tr>
<td>Creative Writing</td>
<td>French I &amp; II</td>
<td>Music Appreciation</td>
<td></td>
</tr>
<tr>
<td>Journalism</td>
<td>French III &amp; IV</td>
<td>Nutrition &amp; Wellness</td>
<td></td>
</tr>
</tbody>
</table>
AR1001 & AR1002 ART 1 (2 Dimensional & 3 Dimensional)
Prerequisite: None
1 Credit: 2 Semesters
Course Fee: $30.00

This course is a basic studio study of art materials and the elements and principles of design that are involved in using a variety of media. AR1001 will explore a variety of drawing media and painting. AR1002 will explore calligraphy, jewelry, ceramics and printmaking. The study of art history will be a part of this class. Work habits, creativity, and art skills are taken into consideration in student evaluation. Earning a combined C or better average in both terms is required to take advanced classes. AR1001 & AR1002 may be taken in either order.

AR2010 ART 2 PAINTING AND DRAWING
Prerequisite: Art 1 (Grade of C or better)
1/2 Credit: 1 Semester
Course Fee: $20.00

This course is an intermediate studio course emphasizing design principles and aesthetics involved in drawing and painting. The grading procedure is the same as Art 1 with greater emphasis on creativity of ideas along with class and work attitudes. Teaching methods are a combination of lecture, demonstration and studio work. The class is for serious art students to learn techniques of painting and drawing and explore a variety of art history topics.
AR2030 ART 2 ART METALS AND SCULPTURE
Prerequisite: Art 1 (Grade of C or better)
1/2 Credit: 1 Semester
Course Fee: $20.00 plus additional costs if working with silver.

This course is an intermediate studio course emphasizing design principles and aesthetics involved in metals and sculpture. The grading procedure is the same as Art 1 with greater emphasis on creativity of ideas along with class and work attitudes. Teaching methods are a combination of lecture, demonstration and studio work. Art history of different cultures, styles and artists will be explored. This course is for the advanced art student who enjoys working with their hands, achieving a high quality of craftsmanship, as well as learning how to develop skills in the use of special tools. The assignments will include fabricating rings and ceramic pieces.

AR2040 ART 2 CERAMICS
Prerequisite: Art 1 (Grade of C or better)
1/2 Credit: 1 Semester
Course Fee: $20.00

This class will explore in-depth ceramics including learning how to throw on a wheel, both basic and advanced projects, and more complex methods of hand building in clay. Students will explore various glazing techniques and finishes. This is a self-paced class that allows for each student's needs and abilities.

AR3050 ART 3 ADVANCED DRAWING & PAINTING
Prerequisite: Art 1 & Art 2 Drawing & Painting (Grade of C or better)
1/2 Credit: 1 Semester
Course Fee: $20.00

This is an advanced studio course in which students build upon knowledge and skills gained in Art 1 and Art 2. Students will further develop their skill in painting and will explore oil painting. Graphite, charcoal, ink, crayon and silverpoint, are some of the mediums students can experience. Discussion, assignments, and presentations on various art history topics will also be an integral part of the course.

AR3040 ART 3 ADVANCED CERAMICS
Prerequisite: Art 2 Ceramics
½ Credit: 1 Semester
Course Fee: $25.00

This is an advanced studio course designed to introduce students to a higher level of ceramic construction. Students will create wheel thrown and hand built ceramic pieces that build on knowledge and skill gained in Art 2. Students will explore creating lids, handles, and large pieces as well as advanced surface decorating techniques. Assessment procedures are similar to Art 2 with more emphasis placed on creativity and technical skill.
**AR3030 ART 3 METALS AND SCULPTURE**
Prerequisite: Art 2 Metals and Sculpture  
½ Credit: 1 Semester  
Course Fee: $20, plus additional if working with silver

Art 3 Metals and Sculpture is an advanced studio course emphasizing the design principles and aesthetics involved in metals and sculpture. Students will build upon knowledge and skills gained in Art 1 and Art 2. They will explore various metal manipulation techniques and sculpting with a variety of materials. Students will become familiar with the work of several artists and begin to develop their own personal style of three dimensional arts. Assessment procedures are similar to Art 2 with an even greater emphasis on creativity and technical skill.

**AR4080 ART IV ADVANCED ART SEMINAR**
Prerequisite: Junior or Senior standing and Art 1, 2, 3  
½ Credit: 1 Semester  
Course fee: $20.00

This advanced art class is for the student who plans to further develop their skills as an artist. This class is structured to tailor to individual art interests and exploration through projects and research. Students will be required to make a portfolio presentation. This course can be taken for repeat credit.

**AR4050 GRAPHIC DESIGN**
½ Credit: 1 Semester  
Prerequisite: Art 1 and sophomore, junior, senior standing  
Course Fee: $20.00

Graphic Design I provides students with a basic understanding of computer graphics. This class focuses on the elements of design and how they are applied to commercial graphic art in relation to the marketing and advertising industry. Students will be working on building a portfolio that shows a basic understanding of the techniques used to create graphics. Students may also have the opportunity to work with professionals in the community to create designs for publication. The main software used in this class for manipulating and creating graphics is Adobe Photoshop.
AR2130 PHOTOGRAPHY I
Prerequisite: Art 1, Sophomore to Senior standing.
1/2 Credit: 1 Semester
Course Fee: $45.00

Photography I provides students with the basic knowledge of traditional pinhole and digital photography. This class primarily focuses on basic photo compositional design and layout used in both traditional and digital photography. Students will use their digital photographs in conjunction with the program Photoshop to graphically manipulate their images. Students will also build a portfolio that shows a basic understanding of the techniques used to create visual interest in their photography. Students will further reflect on how the marketing industry has used these same principles to generate interesting advertising campaigns for today’s youth and pop culture. For this course students will be using both traditional pinhole cameras and digital cameras along with the program Adobe Photoshop.

AR2140 ADVANCED PHOTOGRAPHY
Prerequisite: Photography I, Sophomore to Senior standing; earned a C or better in Photography I
½ Credit: 1 Semester
Course Fee: $50.00

Advanced photography provides students with a more in-depth look at traditional and digital photography. Students will focus on creative film developing skills used in traditional photography as well as more advanced rendering techniques in Photoshop for their digital photographs. Students will continues to build a portfolio that shows a wide range of techniques and creative photographic compositions. Students will further reflect on the strengths and areas for development in their own photographs and the photographs of others. For this course students will be using both traditional and digital SLR cameras along with Adobe Photoshop to manipulate images.
McFarland High School and MATC have a certification/advanced standing agreement for the following courses:

**College Accounting**, **Computer Applications 1** & **Advanced Technology**

**BE3101 & BE3102 ACCOUNTING 1**
Prerequisite: None. Preferred grade level Sophomore, Junior or Senior
1 Credit: 2 Semesters

Accounting 1 provides the basis for understanding the principles of double-entry bookkeeping. The student will learn the processes of journalizing and posting, as well as preparation of worksheets, income statements, and balance sheets. Computers are utilized in Accounting 1.

**BE5201 & BE5202 COLLEGE ACCOUNTING (MATC Dual Credit Course)**
Prerequisite: Accounting 1, (or by consent of the instructor)
1 Credit: 2 Semesters

College Accounting is the Madison Area Technical College (MATC) Accounting 1 - Principles course that emphasizes how general purpose financial statements communicate information about a business entity’s performance and position. This challenging course is taught at the college level. Students and their parents must sign a Dual Credit Student and Parent Agreement and the student must earn a grade of C or better to receive 4 college credits upon completion of the class. These credits may or may not be transferable to other post secondary institutions (check individual post secondary institutions for credit transfer policy). In addition students successfully completing this course are eligible to take the College Board CLEP exam which may allow the student to earn college credit at participating post secondary institutions. An outline of instruction for this course may be found on the following website.

http://programs.matcmadison.edu/programs/accounting/accounting-1-principles

**BE3140 EXPLORING BUSINESS**
Prerequisite: Preferred Grade level of Freshman/Sophomore
Not open to seniors or students who have had Marketing, Entrepreneurship, or Accounting 1
1/2 Credit: 1 Semester

Curious about the world of business? Exploring Business will give you fundamental knowledge about how the world of business touches so much of our everyday lives. Learn about the many business career opportunities available. This course provides an overview of the different aspects of the business world, including the major functions of management, finance, research and development, and human resources. Find out where business fits in your future.
BE3210 PERSONAL FINANCE  
Prerequisite: Preferred grade level--Junior-Senior  
1/2 Credit: 1 Semester  

The modern economy is a jungle—get the financial skills to survive it. Using a variety of activities and media, students will explore the following topics: budgets, proper management of checking accounts in the electronic age, taxes, establishing and maintaining personal lines of credit including loans and credit cards, insurance options and investments for both short and long term horizons. Students will also explore career options and learn about employee benefits and compensation as it will relate to their future financial planning. This course is a must for those students interested in securing a solid financial foundation.

BE4110 PERSONAL & BUSINESS LAW  
Prerequisite: Preferred grade level – Sophomore - Senior  
1/2 Credit: 1 Semester  

Students enrolling in Personal and Business Law will develop an understanding of their legal rights and responsibilities as future consumers, citizens and workers. Through a variety of projects, activities and guest speakers, students will gain an understanding of the American legal system by exploring topics ranging from: courts and court procedures; criminal justice; tort law theory; oral and written contracts; sales contracts and warranties; consumer protection and family law. Legal terminology is emphasized. Students with a variety of career and academic interests will benefit from this informative and practical course. Personal and Business Law is highly recommended for students interested in pursuing careers in business, criminal justice or administrative careers such as court reporting and legal secretary.

CS2010 COMPUTER APPLICATIONS 1  
Prerequisite: None - THIS COURSE IS REQUIRED FOR GRADUATION  
1/2 Credit: 1 Semester  

The Computer Applications 1 course will teach students how to effectively use a computer. Students will have the opportunity to develop skills using the Windows platform and will also have experience using Microsoft Word, Access, Excel, PowerPoint, and Publisher. A competency test option is available upon request for students who are interested in testing out of this course. Inquiries should be made to a student’s guidance counselor. IC3 certification is available.
BE4400  ADVANCED TECHNOLOGY  
Prerequisite: Computer Applications 1, Sophomore, Junior or Senior Standing  
1/2 Credit: 1 Semester  

Welcome to the 21st Century! Part of being successful in this technological society, one must be computer literate and have a working knowledge of many computer tools that are available. Many businesses use these tools as part of their corporate community, so understanding the functions of the various tools will give you the edge in your post-secondary education and your future entry into the corporate world. Students will become advanced in Microsoft Office Professional Software such as: Word, Excel, Access, Powerpoint, and Publisher. Students will be expected to work through a stimulation which incorporates all of these in the business environment.

Advanced Technology is a one term course for students in grades 9-12 who has successfully completed Computer Applications 1. Students interested may earn up to 2 transcripted credits through Madison College for Microsoft Word, Microsoft Excel, and Microsoft Access. Microsoft Office Specialist (MOS) certification is the leading IT certification in the world.

BE3220 BUSINESS MANAGEMENT AND FINANCE  
Prerequisite: Junior, Senior standing  
Credit: ½ credit, one Semester  

Business Management & Finance introduces students to the critical management skills of planning, structuring, controlling and leading in organizations. The course explores how effective managerial decisions are made in business. In addition the student is introduced to the quantitative side of business decisions including solving basic financial problems confronting businesses, including time value of money, access to capital, cash flow analysis, financial statement analysis along with budgeting and forecasting. Students will utilize spreadsheet applications to inform business decisions among several alternatives. This course is designed for students who are seriously considering careers in Business Administration, Finance, and Human Resources.
CS2010 COMPUTER APPLICATIONS 1  
Prerequisite: None - THIS COURSE IS REQUIRED FOR GRADUATION.  
1/2 Credit: 1 Semester  
The Computer Applications 1 course will teach students how to effectively use a computer. Students will have the opportunity to develop skills using the Windows platform and will also have experience using Microsoft Word, Access, Excel, PowerPoint, and Publisher. A competency test option is available upon request for students who are interested in testing out of this course. Inquiries should be made to a student's guidance counselor. IC3 certification is available.

CS2030 ADVANCED COMPUTERS/MULTIMEDIA PRODUCTION  
Prerequisite: Available for sophomore, juniors and seniors  
1/2 Credit: 1 Semester  
This course is designed to take the students into the area of multimedia production. Using Macromedia's Flash, students will produce animation movies and interactive applications that can be used on the Internet or as standalone applications. Students will work with audiovisual recording and editing. Students taking this class need to be creative and self-motivated.

CS2050 PROGRAMMING  
Prerequisite: Computer Science and Software Engineering (CSS)  
½ Credit: 1 Semester  
This course is a continuation of Computer Science and Software Engineering. Students will learn the fundamentals of programming languages. Object Oriented Programming will be taught using a language called JAVA. It is intended for those students who are interested in pursuing a career in computer in programming. The material covered will be excellent preparation for those students who wish to attend either a technical college or university.
CS3020 & CS3022 COMPUTER SCIENCE AND SOFTWARE ENGINEERING (CSS)
Prerequisite: None
1 credit: 2 Semesters

In CSE, students work in teams to develop computational thinking and solve open-ended, practical problems that occur in the real world. They will be introduced to code writing to create interactive Web pages. Students will use face-recognition applications and AppInventor to develop Android apps, while engaging in problems involving social networks, discrete mathematics, cyber-security and eCommerce. Using languages such as Python, students will engage problems involving predictions based on computer models; concepts like probability, chaos, fractals, and artificial intelligence will be developed.

CS2090 WEB DESIGN
Prerequisite: Recommended that you have taken Computer Science and Software Engineering (CSS) but not required.
½ Credit: 1 Semester

This course is meant for students who are interested in a career designing web sites. Web Design will teach you how to build and design websites using HTML and CSS languages. Students will learn to create dynamic web pages using programming languages of JavaScript and PHP along with the database MySQL. Students will learn how to create a Content Management System (CMS) for individuals who have access to the password protected website ‘admin’ area.

CS3010 COMPUTER LAB SUPERVISOR
Prerequisite: Consent of the Instructor
1/4 Credit: 1 Semester

This is an opportunity for interested students to continue their study of computers on their own time and receive credit for their work. Their primary responsibility will be to supervise the computer lab for a given period and tutor beginning students when necessary. Also computer-related projects will be assigned. There will be no formal presentations but continued study is encouraged and assistance will be provided when needed.

TE4020 A+ COMPUTER TECHNOLOGY
Prerequisite: Grades 10, 11 & 12
1/2 Credit: 1 Semester

This course will provide an in depth study of servicing personal computers. You will gain a basic understanding of PC hardware, DOS, Windows 9x and Windows NT/2000, networking, printers and troubleshooting. Knowledge will be gained through online instruction, study manual and hands on labs. Practice test will be taken in class. Students successfully completing this course will be able to successfully prepare themselves to take the exams necessary to earn the A+ Certification by Comptia (Computing Technology Industry Association). This certification sets the standard for those working in the personal computer industry as technicians, help desk, and support staff.
DRIVER EDUCATION

INTERNET DRIVER EDUCATION

BEHIND THE WHEEL TRAINING

CESA #2 provides the driver education instruction at McFarland High School. The classes are offered before school, at 7:00 AM. There is the opportunity to do the class room requirements on the INTERNET. Internet Access and MS Word is required. Class work will be done independently. Registration for Drivers Education is done through CESA #2. Registration forms are available in the High School Office and the Guidance Office, or online at cesa2.com. For more information call 608-588-3727 or go to www.drivered.cesa2.org

DRIVER EDUCATION
Prerequisite: Must be 15 years old to begin the class
Quarter Course No Credit

Classroom instruction deals with driver attitudes, rules of the road, the automobile, and its maintenance, good pedestrian practice, and the development of driving skills. The classroom phase consists of thirty-five (35) hours of instruction. Classes begin at 7:00 a.m. during the school year. Students who plan on enrolling in other Early Bird Classes (i.e. Early Bird Jazz or Vocal Jazz Ensemble) during the school year are encouraged to enroll in Drivers Ed. during the summer. State law requires a minimum of 30 clock hours of class room education. Attendance is critical.

INTERNET DRIVER EDUCATION
Prerequisite: Must be 15.5 years old by the end of class
No Grade, No Credit

An alternative Driver's Education option is the Internet based Driver Education classroom course. Students will be expected to do the class on their own, in their own time frame, via the computer and Internet. Students will need to have Internet accessibility, Microsoft word software, and an e-mail address.

The entire Driver Education Curriculum is located on a website that students will have to access. They will then have to complete the course work, i.e. quizzes, tests and homework on-line.

Students need to be self-motivated. This is an option for the students that cannot schedule themselves in the class for reasons beyond their control.

BEHIND THE WHEEL TRAINING
Prerequisite: Students must be 15 ½ and pass the exams to begin Behind the Wheel Training.
No credit: Summer
Fee: $400.00/Internet $425.00

State law requires a person under the age of 18 to take both the classroom Driver Education and Behind the Wheel instruction to qualify for their driver’s license. McFarland High School has traditionally offered Behind the Wheel instruction during the summer and during a student’s study hall in the academic year. Students may choose to purchase private Behind the Wheel lessons or to participate in this course.
Electives

AL4001  COLLEGE & CAREER READINESS
AL4002  COLLEGE SUCCESS & STUDY SKILLS
SC4200  MEDICAL TERMINOLOGY

AL4001  COLLEGE AND CAREER READINESS
Prerequisite: Freshman or Sophomore standing
½ MHS credit and 3 Madison College (MATC) credits

This course provides a challenging adventure in learning and self-discovery to help students prepare for college and/or careers. Students will develop self-awareness, build relationships and be empowered to make effective choices in college & career decisions. A wide variety of skills will be applied to promote success in high school and readiness for college/career. Students who register through Madison College, and receive a C or better in this course (on the Madison College grading scale), will earn 3 Madison College (MATC) credits. Madison College and MHS grading scales are shared in the course syllabus at the beginning of class.

AL4002  COLLEGE SUCCESS AND STUDY SKILLS
Prerequisite: Junior or Senior standing
½ MHS credit and 3 Madison College (MATC) credits

Students will work on life skills such as motivation, goal setting, interdependence, and self-awareness while also working on academic skills such as test taking, note taking, reading, and other success strategies. The focus of the course is on preparing students for academic and personal success. Students will participate in and reflect on a community service activity. Students who register through Madison College, and receive a C or better in this course (on the Madison College grading scale), will earn 3 Madison College (MATC) credits. Madison College and MHS grading scales are shared in the course syllabus at the beginning of class.

SC4200  MEDICAL TERMINOLOGY (formerly Health Sciences)
Prerequisite: Junior or Senior standing
Registration Fee: $55.00
1/2 Credit: 1 Semester
THIS COURSE IS NOT NCAA CLEARINGHOUSE APPROVED
nor DOES IT COUNT TOWARDS A SCIENCE GRADUATION CREDIT

The words - or terms - which make up the language of medicine are referred to as the terminology of the medical field, or Medical Terminology. This course focuses on communication using the medical language. We will analyze medical terms using work components and classify terms by the structural organization of the body. Both the written and spoken formats for using language will be addressed, including work construction, definition, spelling, and pronunciation of medical term and the interpretation of written materials.

The course fee provides access to the on-line module required through MATC. Purchase of a textbook requires added cost. The textbook is not required, but is a helpful educational resource. Students who successfully complete the coursework are eligible for three dual credits with MATC for Medical Terminology.
ENGLISH

EN1011  ENGLISH 9
EN1012  ENGLISH 9
EN2011  ENGLISH 10
EN2012  ENGLISH 10
EN3030  CREATIVE WRITING
EN3120  COMPOSITION
EN3130  SHAKESPEARE
EN3150  FILM THEORY
EN3191  COMMUNICATION ARTS
EN3230  AMERICAN LITERATURE
EN3290  SCIENCE FICTION
EN3310  ADVANCED GRAMMAR
EN3460  AP LITERATURE
EN3461  AP LITERATURE
EN3402  THE IMPACT OF WAR
EN3730  MYSTERY AND SUSPENSE
EN3801  AP COMPOSITION
EN3802  AP COMPOSITION
EN3940  CULTURAL PERSPECTIVES
LEPEN1  ENGLISH AS A SECOND LANGUAGE
EN1001–EN1004  ENGLISH PREP

**English Prerequisites:**
English III standing means the student has earned at least two credits of English. Likewise English IV standing means the student has earned at least three credits of English.

**English Course Fees:**
The total course fee for English 9 is approximately $24.00. This includes the following books: *The Absolutely True Diary of a Part-Time Indian*, *To Kill a Mockingbird*, and *Romeo and Juliet*.
The total course fee for English 10 is approximately $20.00. This includes the following books: *Crucible*, *I Am the Messenger*, and *Writer's Inc.* *Writer's Inc.* is a writing, mechanics, and usage resource book for students in grades 10 - 12.
There may be course fees for other English electives, depending upon the reading list.

**Recommended For College-Bound Students:**
- AP Composition
- Advanced Grammar
- Composition
- AP Literature

Also, at least two from the following list:
- American Literature
- Multi-Cultural Literature
- Science Fiction
- Shakespeare
- Cultural Perspectives
- Creative Writing
EN1001, EN1002, EN1003, EN1004 ENGLISH PREP
Prerequisite: Teacher Approval
1 Credit per semester, Total = 1 English Credit and 1 Elective Credit
Fee: $10.00

This year-long, every day course works on improving skills in reading and writing in order to help students make up deficits in these areas which may impact their success in future classes. The course includes whole-group instruction, small-group instruction, independent reading of books chosen by students, and the Achieve3000 computer program, which works on reading comprehension, vocabulary, and other reading skills. Students are tested each term to determine their growth in reading. Throughout the year students will learn and reinforce important reading strategies and should gain skills to help them read grade-level materials. Students will also learn writing strategies to help them in writing for a variety of tasks. This course is a replacement for English 9, English 10, or an English elective for upperclassmen.

EN1011 & EN1012 ENGLISH 9
Required for all ninth graders.
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit
Fee: Approximately $24.00

The course is designed as an introduction to literature and formal writing. Students continue to improve their reading comprehension, vocabulary, and thinking skills by studying a variety of texts to analyze plot, themes, characters, and craft. Speaking and listening skills improve as students work in both large and small groups and give a number of presentations. Grammar and punctuation mechanics are reviewed, learned, and applied in writing.

EN2011 & EN2012 ENGLISH 10
Required for all tenth graders.
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit
Fee: $10.00

First and Second Term:
This course is required of all sophomores toward their English credit requirements for graduation. It is structured as a language arts course that builds upon the curriculum in English 9 and prepares students for the elective English courses they will choose for the junior and senior years. The course balances an array of language arts skills: formal essay, public speaking, reading a novel, drama, and poetry as well as language mechanics and grammar.
EN3030 CREATIVE WRITING
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Students interested in writing creatively and regularly should elect this course. Students read their writing and perform critiques on their own work and that of their peers. Writing genres include description, narration, fiction, journal writing and poetry.

EN3120 COMPOSITION
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is designed to provide students with practice in a variety of writing experiences--description, narration and an emphasis on exposition. The course focuses on basic techniques of writing that will bring greater effectiveness to his/her communication in real-world settings whenever possible. Students are expected to build vocabulary, develop grammar and punctuation skills, and adjust their writing for a variety of audiences.

EN3130 SHAKESPEARE
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester Fee: Approximately $25.00 for books & $25.00 for field trip
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Major plays and sonnets of Shakespeare are sampled in this course. The students study the background of the theatre, London, and Shakespeare. Students may attend a production at American Players Theatre. An emphasis on dramatic activities and interpretation is placed on the students' work.

EN3150 FILM THEORY
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester
Does not count as English credit for most 4yr colleges

This course is an introduction to film studies. It is a survey of the American Film Industry as an art form, as an industry, and as a system of representation and communication. The course explores how Hollywood films work technically, aesthetically, and culturally.

EN3191 COMMUNICATION ARTS
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester
DOES NOT QUALIFY AS A NCAA CORE COURSE

This high-energy course will focus on the essential elements of communication. Similar to a speech/communications class many universities offer, students will learn to brainstorm, organize, write, and perform a variety of genres of speech and communication including: personal narrative, persuasion and sales, news cast, special occasion, etc. Students will learn about Monroe's Motivated Sequence: code switching; the importance of body language, practice, and preparation; considering audience; as well as the proper use of detail, sources, props, and visuals. This course is recommended for all students who seek to improve in all areas of communication.
EN3230 CONTEMPORARY AMERICAN LITERATURE (Formerly American Novels)
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester Fee: Approximately $35.00 for books
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Students who enroll in this course will read and discover the social and literary significance of a variety of works written by American authors. Students may study the works of authors such as John Steinbeck, F. Scott Fitzgerald, Langston Hughes, and Amy Tan, among others. Students will be assessed on their analytical essays, class discussions, and presentation work. Students participating in this class MUST be willing to complete substantial daily reading assignments as homework; students will read a total of three class novels and one novel of choice in additional to supplemental readings.

EN3940 CULTURAL PERSPECTIVES
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester Fee: Approximately $30.00 for books

Through a variety of reading experiences, students will examine how people who feel silenced by issues of culture, race, and/or gender raise their voices to bring awareness. Students will discuss and analyze how authors expose and critique the historical and stereotypical influences upon them.

EN3290 SCIENCE FICTION
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester Fee: Approximately $20.00 for books
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This elective course for juniors and seniors focuses on the genre of Science Fiction, Mythology and builds on current trends in Literature. Students read a selection of novels, such as 1984 by George Orwell and Ray Bradbury’s famous novel, Fahrenheit 451. Mythology components will be addressed through a selection of readings about Prometheus, Hercules and many more. The Trends in Literature unit will study how genres, such as Science Fiction and Mythology are embedded in contemporary socio-cultural norms. Students will be assessed on analytical essays, journal writing, visual and written projects and a final exam.

EN3310 ADVANCED GRAMMAR
Prerequisite: Junior standing or above. (Available to sophomores with a ‘B’ average and consent of the instructor.)
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit
Fee: $17.00 for book

Advanced Grammar is an intensive semester of grammar and usage study. Students interested in preparation for ACT/SAT and college entrance exams may find the course particularly beneficial. Students interested in foreign language study may also benefit by taking this course. Recommended for all students who are college bound.
EN3460 & EN3461 AP LITERATURE
Prerequisite: Junior standing or above
1 credit:
Fee: $40
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

AP Literature will focus on several essential questions such as: What is the role of the reader in contemporary texts? How does context shape content in literary texts? How can a reader recognize truth in text and develop a deeper appreciation of literary texts? How do world cultures communicate ideas about values and how is the reader affected by this? How does the manipulation of language and author purpose create meaning and interpretation? The course will examine these questions through a selection of several challenging novels and academic texts. Some novels listed are: Chinua Achebe’s Things Fall Apart, George Orwell’s Animal Farm and Shakespeare’s Macbeth. The course will require a comprehensive summer assignment that will require a fiction and non-fiction text to be read, annotated and analyzed based off several questions.

EN3402 THE IMPACT OF WAR
Prerequisite: Junior standing or above
1/2 Credit: 1 Semester Fees: Approximately $20 for books
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Students will examine through a variety of texts the lasting impact war has created. Students will explore how war has defined and redefined identity, family, and terrorism. Students will gain a greater understanding of how war has shaped the thinking of humans. They will also be able to demonstrate this understanding of thinking through the construction of an independent study project.

EN3730 MYSTERY AND SUSPENSE
Prerequisite: Junior standing or above (underclassmen can take with teacher approval)
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is for students who like to read mystery and suspense stories. The course will focus on short stories and novels of classic suspense writers such as Edgar Allan Poe, Sir Arthur Conan Doyle, and Agatha Christie as well as modern writers such as John Grisham, Tony Hillerman, and Stephen King. Students will be assessed with the following: essays, reaction journals, presentations, projects, and vocabulary quizzes. Students who decide to take this course must be willing to do daily reading assignments.
EN3801 & EN3802 AP COMPOSITION
Prerequisite: Successful completion of Composition with a “C” is strongly recommended. Students must complete a summer assignment prior to the start of the course. Summer assignment includes a mandatory reading list.
NCAA Clearinghouse Approved,
1 Credit: 2 Terms: Grade Weighted
Fees: Approximately $40.00 for books (both terms) plus fee for choice novel TBD.

This course, which is comparable to a university-level introductory composition course, is intended for students who are dedicated to improving their reading and writing skills. They will become skilled readers of essays and non-fiction written in a variety of periods, disciplines, and contexts. Students will learn the basics of rhetoric, and how an awareness of rhetorical devices and strategies can aid in analysis. They will also become skilled writers who compose for a variety of purposes. Students will develop an awareness of their own composing processes: the way they explore ideas, plan, draft and revise their work. The class will prepare students to take the A.P. Language and Composition exam in the spring. Students must complete a summer assignment prior to the start of the course.

LEPEN1 ENGLISH AS A SECOND LANGUAGE
Available for students for whom English is a second language
½ credit 1 Semester

English for ESL students is a course that provides English language skills for students with limited English proficiency for which English is a second language. The course provides instruction and practice speaking, listening, understanding grammar and usage, building vocabulary, reading, and writing. The goal of the class is to improve all English language components through speaking, listening, reading short stories and news articles, writing paragraphs and essays, and refining reading and vocabulary development, aural comprehension.

67
### FAMILY & CONSUMER SCIENCES

<table>
<thead>
<tr>
<th>Sewing Classes</th>
<th>Foods Classes</th>
<th>Health Science Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FE1040 Foundations of Sewing</td>
<td>FE1120 Food Choices</td>
<td>FE1175 Intro to Health Sciences</td>
</tr>
<tr>
<td>FE1041 Fiber-Fabric-Fashion</td>
<td>FE1140 World of Food</td>
<td></td>
</tr>
<tr>
<td>FE1042 Creative Sewing Techniques</td>
<td>FE2100 Culinary Arts</td>
<td></td>
</tr>
<tr>
<td>FE1043 Design &amp; Career Exploration</td>
<td></td>
<td>MATC Nursing Asst. (Summer)</td>
</tr>
<tr>
<td><strong>Parenting &amp; Child Care Classes</strong></td>
<td><strong>Other FACS Classes</strong></td>
<td></td>
</tr>
<tr>
<td>FE3010 Parents and Children</td>
<td>FE1170 Intro to Housing Services</td>
<td></td>
</tr>
<tr>
<td>FE3020 Assist. Child Care Teacher I (4-6yrs.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FE4020 Assist. Child Care Teacher II (Infant &amp; Toddlers)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FE1040 FOUNDATIONS OF SEWING I**

- **Prerequisite:** None
- **1/2 Credit:** 1 Semester
- **Fee:** $20

In this class students will apply basic industry terminology to complete projects in lab settings. Students will transform 2 dimensional patterns into 3 dimensional items while learning to interpret a technically written format. Students will also design and develop a quilt for Project Linus which will be displayed and donated to the organization. Additionally, students can expect to increase their 21st century skills.

**FE1041 FIBER-FABRIC-FASHION SEWING II**

- **Prerequisite:** "C" or above in Foundations of Sewing I; Completion of Foundations of Sewing I skills
- **1/2 Credit:** 1 Semester
- **Fee:** $20

Students apply skills and terminology learned in foundations of Sewing I and are required to advance in new skills as they construct textile projects. A more in depth study of the following process will be undertaken: the development of a project from the initial fiber creation through the milling phase and finally the completed textile item. Additionally, students will increase their 21st century skills.

**FE1042 CREATIVE SEWING TECHNIQUES SEWING III**

- **Prerequisite:** "C" or above in Foundations of Sewing and Fiber-Fabric-Fashion; Completion of Fiber-Fabric-Fashion Skills II
- **1/2 Credit:** 1 Semester
- **Fee:** $20

Students use skills mastered in Foundations of Sewing I and Fiber-Fabric-Fashion II. Students will continue to build on skills and terminology learned and applied previously in Foundations of Sewing I, and Fiber-Fabric-Fashion II. Course work will focus on the process of engineering textiles as students gain experience in textile creation while apply industry stream lined sequencing. 21 century skills will be clearly identified as industry standards and skills required are learned and applied.
FE1043 DESIGN AND CAREER EXPLORATION SEWING IV
Prerequisite: "C" or above in Foundations of Sewing I and Fiber-Fabric-Fashion II and Industrial Textile Engineering III;
1/2 Credit: 1 Semester
Fee: $20

Students who want to continue to build textile and design career skills will find this class the challenge that moves them forward. A project portfolio ready for post-secondary career options will be the end product.

FE1120 FOOD CHOICES
Prerequisite: None
1/2 Credit: 1 Semester
Fees: $20.00

Nutrition, consumer skills, and career opportunities will be taught in conjunction with food preparation skills. Students begin lab and course work with the five food groups and progress to recipe development (through the process of a pizza contest), and regional cuisine of the United States. Food safety and sanitation is emphasized throughout the lab experiences. This class involves small group lab situations and stresses 21 century skills such as: health literacy, communication & collaboration, productivity & accountability.

FE1140 WORLD OF FOOD
Prerequisite: Food Choices
1/2 Credit: 1 Semester
Fees: $20.00

Advanced food preparation skills will be gained in all areas. Food-related topics such as nutrition and its relationship to health, food borne illness and safe food handling will be incorporated. Units of study are outdoor grilling, entertaining & meal planning, vegetarianism, and careers. An integrated study of food and culture of foreign countries will be the focus of the class. Teamwork, time management and social etiquette will increase employability skills.

FE1170 INTRODUCTION TO HOUSING SERVICES (Interior Design)
Prerequisite: None
1/2 Credit: 1 Semester

This course is designed to explore housing and interior design. Topics covered include: architectural styles, elements of design, color schemes, painting techniques, textiles, window, wall and flooring treatments, furniture styles and floor plans. During the term, students will complete a housing project, where they apply the knowledge gained about space planning, decorating and furnishing to their own personal living space. Related careers will be explored. Additional learning activities may include guest speakers and fieldtrips.
FE2100 CULINARY ARTS
Prerequisite: Food Choices (Highly recommended: World of Foods)
1/2 Credit: 1 Semester Fees: $20.00

Are you interested in a food service career? Would you like to become a culinary professional? If so, this would be a great class for you to take. Investigate culinary career opportunities while participating in hands-on labs to provide effective practice of basic culinary skills. This will include knife skills, time management, lab management, food production, food presentation, and food service standards and regulations. Opportunities for catering experiences, quantity food productions, and safe food handling will be the focus of this class. This class is built on the ProStart curriculum and students have the chance to become ServSafe certified at a managerial status.

FE3010 PARENTS AND CHILDREN
Prerequisite: Sophomore, Junior or Senior standing
1/2 Credit: 1 Semester

This class is designed for students who plan to become a parent in the future and/or work with children. The many phases of childhood and corresponding phases of parenthood are explored. Topics of study include: Teen Pregnancy, Pre-natal development (including reproduction, pregnancy, and childbirth), Birth to Age 1 (including Baby simulation activities, and information on caring for babies and early brain development), Toddlers, ages 4-6 and discipline. This class provides information about career options that involve children. Some additional learning experiences include guest speakers, field trips, and time spent observing and interacting with children. This class is required for those wanting to enroll in Assistant Child Care Teacher.

FE3020 ASSISTANT CHILD CARE TEACHER CERTIFICATION – CHILD CARE 1
Prerequisite: A grade of "B" or above in Parents and Children or consent of instructor. Consent to enroll in this course may also be given if student is enrolled in Parents and Children during the same school year.
1/2 Credit: 1 Semester

This class develops the skills needed to work in the child care field with children four years and above. It covers curriculum planning, guiding interactions between children and keeping children safe and healthy while in your care. Weekly observations, during class time, at a local daycare site are required. Skills and topics covered in this class are beneficial to any student who wants to work with children, in the future. Upon successful completion of this course a student can receive an Assistant Child Care Teacher certificate that allows them to be employed in a child care center at age 17.

FE4020 ASSISTANT CHILD CARE TEACHER CERTIFICATION – CHILD CARE 2 (Infant and Toddler)
Prerequisite: ASSISTANT CHILD CARE TEACHER CERTIFICATION – CHILD CARE 1
½ Credit: 1 Semester

This class is a continuation of ACCT 1 and will required increased time in a local child care facility, lesson planning and development of age appropriate activities. The focus of this class will be working with children from birth to age three. A certificate can be earned that will allow you to work with infants and toddlers at the age of 17. CPR and 1st Aid certifications will also be included. The state requirements are that no Infant and Toddler certification can be given without first obtaining the ACCT certification. This means that if the 2nd quarter is chosen, the 1st quarter must have been completed beforehand. It is highly recommended that students electing to take the 2nd quarter do so consecutively in the same school year.
FE1175 INTRODUCTION TO HEALTH SCIENCES
Prerequisite: None
½ Credit: 1 Semester

The health care industry in Wisconsin is projected to create nearly 30,000 new jobs by 2016. This course will focus on the health care delivery system, the five career pathways within health sciences, the exploration of employment options in 250 different careers (to include guest speakers, job shadows and field trips), what it takes to become a health care professional, basic patient care procedures, taking/recording vital signs, cultural and ethical awareness, infection control practices, and an introduction to geriatrics which is the fastest growing segment of our population. There will also be an introduction to medical terminology to prepare students to progress to Health Sciences I & II and Anatomy. It is a great way for students that are considering a career in the health sciences to explore the many options available to them.

NURSING ASSISTANT
Offered through MATC – Summers Only
Prerequisite: 16 years of age before or during class (Highly Recommended: Health Sciences Occupations 1 & 2)
.75 Credit: 6 Weeks; See Mrs. Brady for details
Course Fee: MATC course tuition, book, and kit are the responsibility of the student.

This course prepares students for employment as nursing assistants. Students learn communication skills, basic nursing and personal care skills, client/resident rights and care of clients/residents. A supervised clinical experience with direct client care is a major component of the course. Upon completion, the student is eligible to take the certification exam for the Wisconsin Nurse Aide Registry.
HEALTH

HL1010 HEALTH
Prerequisite: Required for all freshmen.
1/2 Credit: 1 Semester

This freshmen health class examines the various kinds of health issues that young adults may face in their high school and post high school lives. Timely and often sensitive areas of discussion are covered to help make each individual student more aware and more informed. Students will be better prepared to make lifestyle decisions, choices, and alternatives best suited to their physical, social, and mental development. Topics generally discussed in the class do cover a wide range of subject matter and are open to change as the needs of students and society change. Some of the main areas of discussion include: Personal Health, Diet, Nutrition, Abuse of and Addiction to Alcohol, Tobacco, and Other Drugs, Career Education as it relates to Health Careers, Mental/Emotional Wellness, Relationships, Sexuality/Human Growth & Development (HGD) and Violence, Bullying & Harassment.

During the five class period HGD unit, we will be discussing different aspects of human sexuality, including:

1. Abstinence
2. Sexual, Personal Health
3. Date Rape/Assault
4. Teen Pregnancy
5. Protective Behaviors
6. Contraception

While reinforcing abstinence, the primary source of curriculum delivery will be the health teacher, with the use of a health professional to teach information on contraception.

If parents wish to exempt their child from the HGD unit, please send a written statement to Jeffrey Finstad, Principal. If you choose to remove your child from the HGD Unit, your child will be given an alternate program to complete for this unit of the class.
INDEPENDENT STUDY

IN1001 and/or IN1002
INDEPENDENT STUDY
1/4 - 1/2 Credits

Students may request independent study for credit. The first step is to obtain an application form from the guidance counselor when students select courses for the upcoming school year. The student then must contact a teacher who will accept the responsibility for facilitating the student’s learning experiences. A detailed proposal with objectives, activities, and methods of evaluation must be submitted to the faculty by the student for approval prior to receiving permission to enroll in the course. Independent study without the administration’s approval will not receive credit.

The student will be required to present a report at the end of the semester to a faculty committee of no fewer than two (2) faculty. This oral presentation must demonstrate skill(s), project(s) and/or a written report that the student completed to meet the objectives of his/her independent study. The oral presentation must be completed no later than one week before the end of the semester.

Providing a meaningful and well monitored independent study experience requires considerable effort on the part of the teacher. The teacher must account for a student’s attendance during the independent study period. The teacher will also be expected to monitor the progress of the student and to summarize the progress upon request from the principal or the parents of the independent study student. Independent study is not an easy way to take a course. It is rather, an opportunity which will require more effort on the part of the teacher and the student. Teachers who do not want the extra responsibility should refuse to accept independent study students. Contracts for Independent Study must be completed by the student, teacher, parent and receive administrative approval by the end of the semester prior to enrollment in the course.
Integrated Student Services

Special Education Services
The District provides excellent special education services in the following areas: emotional behavioral disabilities, learning disability, speech or language disorder, cognitive disability, visual impairment, hearing impairment, orthopedic impairment, other health impairment, autism, and traumatic brain injury. If you have concerns about a child's development, contact the school administrator and ask to have the student screened for possible special education services. If this student does not attend a district school, but is a resident of the school district, please contact the Director of Integrated Student Services at 838-4514 and ask about having the student screened.

Special Education Courses
As mandated by law, the McFarland School District has developed programs to meet the needs of students identified as having Special Educational Needs. Programs and supports provided through the special education department are designed to address the individual's needs as identified by the IEP team. The McFarland School District fully supports the concept of least restrictive environment as mandated by the law. For this reason, students are educated in regular education classes as much as possible with differentiated instruction, support, modifications, and accommodations. Case managers will go over course selections and may recommend special courses not listed here that have been suggested through the IEP process.

Student Services and Special Advisory Council
The Student Services and Special Education Advisory Council is a committee comprised of parents and educators who meet three times a year to review special education and student services programs, curriculum, equipment and facilities. Please contact the Director of Integrated Student Services at 838-4514 for more information.

Section 504
Section 504 prohibits discrimination against persons with disabilities by school districts receiving federal financial assistance. Each district must provide accommodations and services so that students with disabilities have access to equitable participation in programs and activities. Without these modifications and/or intervention, the student would not have an equal opportunity to receive an appropriate education. Referrals for an evaluation under Section 504 may be made by parents, classroom teachers, other school personnel, students themselves or outside agencies that represent the student by contacting the building administrator.

Services
The Pupil Services staff within each building consists of staff in guidance, school psychology, and nursing. These professionals work with staff, parents and community resources to assist students in optimal personal, social, educational, health and occupation development.

Services include:
- Individual counseling concerning social and personal issues.
- Screening and assessments for academic, social and emotional needs.
- Classroom discussions.
- Consultation with teachers and parents.
- Developmental guidance activities covering topics such as decision-making, feelings, friendship, cooperation, conflict resolution, drug awareness, and safety issues.
Special education needs assessment, which may include individual measurements of intellectual functioning, academic performance, social behavior, perceptual motor development, and adaptive behavior functioning.

Small group work, such as new student groups, family change groups, friendship groups and social skills groups.

Alcohol and other drug screening or resource information.

Emergency health services and maintenance of immunization and health records.

Public health services, disease prevention, health promotion.

If you do not want your child to participate in the small group pairings listed above, please contact your building administrator.

Building C.A.R.E. Team (Children’s Assets & Resiliency in Education)
Pupil Services staff, along with special educators, also function as part of a building CARE Team, which is a problem solving group where teachers, other staff and parents (when appropriate) meet to discuss student needs. Student Services staff assist in:

- Reviewing information and discussing alternatives for working with students in regular education.
- Clarifying concerns about students in regular education.
- Meeting with parents, teachers and other support personnel about student needs.
- Coordinating the efforts of school staff in meeting student needs.

Special Education Screening and Referral Procedures
Any person aware of a child between the ages of birth through 21 who may be experiencing physical, mental, emotional or learning problems may contact the Director of Integrated Student Services or building administrator to initiate screening services that will determine if a referral for special education is appropriate. In addition, any teacher or administrator would be able to assist in making a referral. Screening includes: children new to the District, students currently enrolled, resident students attending a private school, and children below school age. For additional information contact Integrated Student Services at 838-4512.

Referral Procedure
The school district shall solicit and receive referrals of students suspected of needing special education services from all persons who have responsible cause to believe that such needs exist. Any health care professional, such as a physician, nurse, psychologist or social worker, including school staff who thinks the child has a disability, is required to make a referral to the school. Anybody else, such as preschool/daycare provider or neighbor, including parents, who think a child might have a disability, may refer the child to the school.

How:
- Referrals must be made in writing, include date of referral;
- State why child has a disability;
- Include child’s and parents’ names;
- Before referral is made the person making the referral must inform the child’s parents of the pending referral. Please note the time and date;
- Send the referral to Mr. David Witte, Director of Integrated Student Services, 5101 Farwell Street, McFarland, WI 53558.

Specific state criteria will be adhered to in determining eligibility for specific handicapping conditions. Referrals of children suspected of needing special education services shall be referred to the appropriate building administrator, or the Director of Integrated Student Services at 838-4514.
IEP Team Evaluation
Whenever a child is referred who is suspected of needing special education services, the school district shall establish an Individual Education Program (IEP) team of evaluators. The appointment of this team shall be the responsibility of the Director of Integrated Student Services. All Individual Education Program (IEP) teams will include at least two persons who are District employees and have expertise in assessment and programming for the suspected disability of the child being evaluated. For a child with a suspected learning disability, a general education teacher will be a member of the team. For every referral concerning a minority child, a member of that minority shall be allowed input to the team's decision making. The process shall include the collection and analysis of information from the parent(s)/guardian pertaining to the needs of the child. The Director of Integrated Student Services shall approve the evaluation process and may request additional information.

Procedural safeguards for evaluation including the following:
The notice of intent to evaluate shall be sent to the parents/guardians that will include:
• A full explanation of the due process/procedural safeguards in their native language or other mode of communication.
• A description of the evaluation proposal, an explanation of why the evaluation is proposed, any options that were considered, and the reasons why those options were rejected;
• A description of each evaluation procedure used as a basis for the evaluation;
• The type of professionals conducting the evaluation;
• A description of any other relevant factors.

Written parental consent shall be obtained when a child is being evaluated or re-evaluated by the District. This consent form shall include:
• A statement documenting that the parent understands the content of the notice;
• Information on the general areas to be evaluated or re-evaluated;
• Information on the general types of procedures to be used.

For more information contact:
Dave Witte
Director of Integrated Student Services
(608)838-4514
**ME2001 & ME2002**  
*Marketing 1—Foundations of Marketing*

**ME3110**  
*Entrepreneurship*

**ME3150**  
*Retail Marketing*

**ME4001 & ME4002**  
*Marketing 2—Business Management, Tourism, and Sport and Event*

**ME4101 & ME4102**  
*Marketing 3*

---

**ME2001 & ME2002 Marketing 1—Foundations of Marketing**

**Prerequisite:** Sophomore, Junior, or Senior Standing  
**1 Credit:** 2 Semesters

With the constant changing world, this class will be an upbeat, interactive class that is always changing. **You will learn the basic fundamentals of marketing through projects and activities that will be completed as individuals and in small groups.** Marketing includes promotions, personal and business selling, economics, distribution, pricing, and **creating new products and service.** Students will **propose a new marketing plan for a current product** and design a new product. **We will also study current events and trends in business and marketing.** All students in this class have the opportunity to be involved in **DECA; An Association of Marketing Students.** DECA members will have many opportunities to use what they have learned in class on community service projects and in competitive events. **You will also have an opportunity to be trained and work in our “Spartan Headquarters”, our school store that is open to the public.** This course is offered as a Dual Credit Marketing Class through Madison College. Earn up to 3 credits!

---

**ME3110 Entrepreneurship**

**Prerequisite:** Sophomore, Junior, or Senior Standing  
**½ Credit:** 1 Semester

Entrepreneurship is what drives the global economy today. In this class students will learn how to **create, finance, and operate** their own business. Students will develop a business plan **that will include selecting products and services, a location, and then describing their staffing and marketing plans in order to insure their success.** By the end of this class, students will be able to determine if business ownership is a career path they want to consider. Student in Entrepreneurship will also develop their leadership skills, learn about successful management styles, and become aware of what will make a business world famous. All students in this class have the opportunity to be involved in **DECA; An Association of Marketing Students.** DECA members will have many opportunities to use what they have learned in class on community service projects and in competitive events. **You will also have an opportunity to be trained and work in our “Spartan Headquarters”, our school store that is open to the public.**
ME3150 Retail Marketing  
Prerequisite: Sophomore, Junior, or Senior Standing  
½ Credit: 1 Semester  

Retail Marketing is a competitive, continually changing field in which workers buy, stock, advertise, display and sell clothing and accessories. This course is designed to provide students with the experience and knowledge in different phases of retail marketing. Students will be able to indulge in the information of buying, designing, and running a retail store. Students will be able to explain how retail marketing relate with multiple projects, designs, and other on hands learning activities. All students in this class have the opportunity to be involved in the student organization DECA. This organization allows students to utilize classroom instruction in real life situations. Students enrolled in Retail Marketing will be trained and use the school lab, Spartan Headquarters, as a focus during content.

ME4001 & ME4002 Marketing 2—International Marketing, Hospitality & Tourism, Sport & Event  
Prerequisite: Marketing 1, Junior or Senior Standing  
1 Credit: 2 Semesters  

Marketing 2 will continue were Marketing 1 ended in order to complete your study of each of the marketing functions. You will focus on applying your marketing skills to individual and team projects in three areas; International Marketing; Hospitality and Tourism Marketing; Sports and Event Marketing. In International Marketing unit students will look at how marketing is used in different countries and in our world economy. Hospitality and Tourism will require students to explore the growing tourism industry by studying industry leaders, ranging from Disney, Pixar, and the Tommy Bartlet Ski Show to mega water parks such as the Kalahari. The ever changing world of Sports and Entertainment Marketing will allow students to propose a sport or entertainment event that could be held in our local market. In the class, students may be required to work will local businesses in preparing their proposals.

ME4101 & ME4102 Marketing 3  
Prerequisite: Marketing 1, Enrolled in Marketing 2  
1 Credit: 2 Semesters  

Students enrolled in Marketing 3 will continue their high school education in the workforce. Students must participate in the Wisconsin Marketing Skills Certificate Program. This instructor will meet with the student and employer to evaluate competencies needed to receive the certificate. Parents and students will meet with the Marketing Instructor in May to set up the program for the next school year. Employment may begin in the summer prior to their senior year of high school and students must continue at the same training station or business until the end of the school year. Students will receive one credit when they have completed a minimum of 540 hours of employment or training.

DECA—An association of marketing students; is a local, state, and nation organization for students enrolled in marketing or business courses. Students may attend leadership labs, career development conferences, and various competitions throughout the state. The four sides of the DECA diamond will be used for events. Annual events which DECA members can participate in are: Christmas in the Village, Trip to Bucks Game, Districts Competition, State Competition, and National Competition. Students will also be trained in Spartan Headquarters. The annual dues for a DECA membership are $20.00.
MA1101 & MA1102  INTRO TO ALGEBRA TOPICS (1 cr)
MA1303 & MA1304  ALGEBRA SUPPORT (½ cr)
MA1301 & MA1302  ALGEBRA 1 (1 cr)
MA1401 & MA1402  GEOMETRY (1 cr)
MA1403 & MA1404  GEOMETRY SUPPORT (½ cr)
MA2500 & MA2501  ALGEBRA WITH APPLICATIONS (1 cr)
MA2201 & MA2202  ALGEBRA 2 (1 cr)
MA2600  STATISTICS & PROBABILITY (½ cr)
MA3201 & MA3202  ADVANCED MATH 1 (1 cr)
MA4101 & MA4102  ADVANCED MATH 2 (1 cr)
MA5101 & MA5102  AP CALCULUS AB (1 cr)
MA5201 & MA5202  AP CALCULUS BC (1 cr)

Freshmen Math Placement
Freshmen placement for math classes is completed by the eighth grade math teachers. A specific recommendation is made to the student and parents during the spring semester of their eighth grade year. Students and parents are given an opportunity to question and discuss this recommendation with their eighth grade math teacher. Students on the bubble (between two particular math classes) may be able to improve their opportunities by attending summer school. Eighth grade math teachers may offer an examination to provide additional data while making their recommendation.

- Students earning lower than a C are recommended to repeat the course before moving on to the next level.
- Unless math department and guidance approved, students who fail the 2nd half of a math course are required to repeat the entire course.

Calculators in Mathematics at MHS
The calculator we recommend is the Texas Instruments Graphing Calculator (specifically the TI-84, or any TI-84 series calculator). It has many capabilities that are not present in the standard scientific calculators. Besides graphing, it allows for eight lines of display for text. This allows students to enter, review, and edit large amounts of data. It is also programmable. Teachers have TI-84 software on their SMART boards so students can follow along and learn how the calculator functions. These calculators are allowed on the ACT, SAT and AP exams. The same calculator will be used throughout their high school experience.
MA1101 & MA1102: INTRODUCTION TO ALGEBRA TOPICS  
Pre-requisite: recommendation by 8th grade teacher  
1 credit: 2 semesters  

This course focuses on building the prerequisite skills and number sense necessary for success in Algebra. Units of study will include the language of Algebra, solving and graphing linear equations and inequalities as well as computational fluency. Although this course counts as math credit toward high school graduation, it may not count as a math credit at some secondary institutions.

MA1301 & MA1302 ALGEBRA 1  
Prerequisite: Recommendation from eighth grade math teacher  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit  

This course is the traditional first year of high school mathematics. It is recommended for all students who are planning on attending a post-secondary school. Units of study include the language of algebra, operations with exponents and rational expressions, solving linear and quadratic equations, modeling with mathematics (graphs, tables and equations) for linear, exponential and quadratic functions, linear inequalities, polynomials, systems of equations, statistics, and probability. Success in subsequent math classes is dependent upon the knowledge and skills acquired while enrolled in Algebra 1. A graphing calculator is required for several units and tests.

MA1303 & MA1304 ALGEBRA SUPPORT  
Prerequisite: To be taken concurrently with Algebra 1. Teacher recommendation required.  
Total Credit: ¼ math credit per semester  

This course is aimed at helping students build procedural fluency and improve the underlying skills needed to be successful in Algebra. Focus will be on pre-teaching and re-teaching concepts and skills being learned in Algebra as well as supporting student with successful homework completion. The course will run for 45 minutes every other day during a study hall or guided study period.

MA1401 & MA1402 GEOMETRY  
Prerequisite: Recommendation from eighth grade math teacher for freshman or a grade of C or better in Algebra 1 or 1B  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit  

This course stresses the basic structure of geometry and proficiency in developing geometric vocabulary. Units of study include parallel lines, angles, triangles, polygons, circles, constructions, area and volume formulas, coordinate geometry, trigonometry, and transformations. Concepts of special geometry are integrated with plane geometry throughout the course. Formal proofs are applied with a balance of theory and application. A Graphing Calculator is required for several units and tests.
MA1403 & MA1404 GEOMETRY SUPPORT

Prerequisite: To be taken concurrently with Geometry. Teacher recommendation required.
Total Credit: ½ math credit per semester

This course is aimed at helping students build procedural fluency and improve the underlying skills needed to be successful in Geometry. Focus will be on pre-teaching and re-teaching concepts and skills being learned in Geometry as well as supporting students with successful homework completion. The course will run for 45 minutes every other day during a study hall or guided study period.

MA2500 & MA2501 ALGEBRA WITH APPLICATIONS – MATC Dual Credit Opportunity

Prerequisite: Junior or Senior standing and successful completion of Algebra 1 (or Algebra 1B) and Geometry or consent of MHS Math Department. Students who have already completed Algebra 2 are not eligible for this course.
1 credit: 2 semesters

SPECIAL NOTE: Students who plan to attend a 4-year college like UW-Madison need to SUCCESSFULLY COMPLETE ALGEBRA 2 in addition to completing a formal algebra and geometry class. Most 4-year institutions expect students to take math all four years of high school and frown upon students who do not take math their senior year. Studies have shown that students who do not take a math class their senior year perform poorly on college-entrance exams and struggle their freshman year of college, particularly on mathematically based courses.

At the beginning of the course, students will have the opportunity to take the math portion of the COMPASS test. COMPASS is an untimed, computerized test that helps MATC evaluate skills and place the students into appropriate courses. This class is designed to help students begin and sometimes bypass Intermediate Algebra – an "entry level" class where MATC expects students to enter but a majority of students is not ready. At the end of the course, the students will be accessed on the COMPASS test. This will allow for invested parties to see how much growth and improvement has been gained. Contingent upon the students' scores, a student may be placed in Intermediate Algebra (or higher) at MATC.

Topics include but are not limited to the real number system, linear equations and inequalities, functions, systems of linear equations and inequalities, exponents, polynomials, factoring, rational expressions and equations, radical expressions, quadratic equations, and complex numbers. Additional topics may also include but are not limited to matrices, logarithms, and right triangle trigonometry. Being able to discover and master additional topics may be limited, since this class is designed to allow more time on algebraic topics students find to be more difficult or challenging.

If a student earns a solid C or better through McFarland High School, then the student will also earn 3 transcripted credits at Madison Area Technical College (MATC) for Elementary Algebra with Applications (Course #10-804-110). Successful completion of this course prepares learners to succeed in technical mathematics courses at MATC and helps students prepare for college-entrance exams.
MA2201 & MA2202 ALGEBRA 2  
Prerequisite: Successful completion or Algebra 1 (or Algebra 1B) and Geometry  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit

This is a second course in algebra, which teaches the development of advanced algebraic skills. Units of study include solving linear, compound, and quadratic equations, polynomials, complex rational expressions & equations, logarithmic functions, exponential functions, trigonometry, coordinate geometry, statistics, and probability. These units, with their related skills, form an essential part of the required mathematical background needed in college preparatory classes. The use of a graphing calculator is encouraged for most units and tests.

MA2600 STATISTICS AND PROBABILITY  
Prerequisite: Successful completion or concurrent enrollment in Algebra 2  
1/2 credit: 1 Semester  
NCAA Clearinghouse Approved

This is a one-term course designed for students who want to supplement their high school mathematics curriculum. The students will study how statistics and probability are used to predict outcomes, organize, and interpret data. The units of study will include organizing data, averages, variations, probability simulations, binomial and normal distributions, hypothesis testing, regression, correlation, and chi-square testing. The use of a graphing calculator is strongly encouraged for most units and tests. This class may be taken concurrently with MA3201 (Advanced Math 1), MA4101 (Advanced Math 2), or MA5101 (AP Calculus).

MA3201 & MA3202 ADVANCED MATH 1  
Prerequisite: Grade of C- or better in Algebra 2.  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit

This course is the traditional fourth year of college preparatory mathematics. Advanced units of study include trigonometry, coordinate systems, logarithmic functions, exponential functions, quadratics, polynomials, analytical geometry, conic sections, vectors, sequences, probability, and statistics. This provides for an excellent preparation for collegiate studies and ACT/SAT preparation. This course is highly recommended for all students who may enter a field related to business, science, or mathematics. The use of a graphing calculator is strongly encouraged for most units and tests.

MA4101 & MA4102 ADVANCED MATH 2  
Prerequisite: Grade of C- or better in Advanced Math 1 or Grade of A in Algebra 2  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as UW Madison Core Credit

This course will be an extensive and intensive review of the high school mathematics curriculum and a prelude to college calculus. Advanced and theoretical units of study will include linear, quadratic, polynomial, exponential, logarithmic, and trigonometric functions, vectors, sequences, series, matrices, combinatorics, and limits. This course will provide a challenge for the advanced math students who are interested in a collegiate level math experience, so some aspects of personal growth may be experienced. It is recommended that this course be completed before taking AP Calculus. A graphing calculator is necessary for most units and tests.
MA5101 & MA5102 AP CALCULUS AB
Prerequisite: Grade of C- or better in Advanced Math 2
1 Credit: 2 Semesters, Grade Weighted
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is for the advanced student who plans to continue their study in any math related field. This course is equivalent to a first semester college level calculus course. Techniques and applications of calculus are studied including limits, differentiation, and integration. The intent of the course is not necessarily to replace the collegiate calculus course, but rather prepare the student for an easier transition to collegiate academics. A graphing calculator is necessary for most units and tests. Students are strongly encouraged to take the AP exam.

MA5201 & MA5202 AP CALCULUS BC
Prerequisite: Grade of C- or better in AP Calculus AB
1 Credit: 2 Semesters, Grade Weighted
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is for the advanced student who plans to continue their study in Calculus. This course is equivalent to the second semester of a college level calculus course. See AP College Board website for a complete list of topics covered. A graphing calculator is necessary for most units and tests. Students are strongly encouraged to take the AP exam.

MATHEMATICS COURSE SEQUENCE
Courses with bold outlines are open to ninth graders, depending upon the recommendation from their eighth grade math teacher.
MU110Q, MU112Q CONCERT BAND
MU120Q, MU122Q SPARTAN CHOIR (9th/ 10th grade choir)
MU130Q, MU132Q CONCERT BAND/SPARTAN CHOIR (9th GRADE BAND/CHOIR)
MU140Q, MU142Q SYMPHONIC BAND/SPARTAN CHOIR (10th GRADE BAND/CHOIR)
MU160Q, MU162Q A CAPELLA Band/Choir (11/12th GRADE BAND/CHOIR)
MU210Q, MU212Q SYMPHONIC BAND
MU220Q, MU222Q WIND ENSEMBLE
MU240Q, MU242Q CHAMBER STRINGS (9-12)
MU250Q, MU252Q A CAPELLA CHOIR
MU2301 EARLY BIRD JAZZ
MU2302 SECOND LAKE JAZZ ENSEMBLE (BY AUDITION)
MU2400 MUSIC THEORY
MU2350 VOCAL JAZZ/ CONTEMPORARY A CAPELLA ENSEMBLE
MU4400 MUSIC INDEPENDENT STUDY: SENIOR RECITAL

FEES:

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choir/Band - Solo-Ensemble Accompanist</td>
<td>$20.00</td>
</tr>
<tr>
<td>Band - Instrumental Rental Fee</td>
<td>$75.00</td>
</tr>
</tbody>
</table>

MU110Q, MU112Q CONCERT BAND
Prerequisite: None
1 Credit: 2 Semesters

This band is composed of 9th grade students who have had previous band experience. It meets every other day throughout the school year. During the first term, emphasis is on preparation for marching band performances at home football games. This includes evening rehearsals scheduled in advance. In the first term and second term, students perform in several concerts, participate in the solo ensemble festival and receive a private or small group lesson. Practice time outside of class is required and considered vital to the students’ continued growth on their instruments. Students also have the option of participating in the Pep Band which performs at a number of home athletic events.
MU120Q, MU122Q. Spartan Choir (9th / 10th Grade Choir)
MU130Q, MU132Q. Concert Band/Spartan Choir (9th Grade)
Prerequisite: None
1 Credit: 2 Semesters

Cantus (pronounced “Kahn-toose”) is a choir intended to introduce students to intermediate 4-part music, as well as basic music reading skills. The group performs for the Fall Concert and Spring Concert, as well as a Cabaret/Pops concert in late February. Participation in all concerts is a course requirement. On October 23, Cantus will participate in the all-choir retreat. Students will return on the evening of October 24. Grading is assessed based on music literacy (music reading, theory, and ear training), rehearsal skills (participation, writing activities, and conduct), and performance assessment (concert and dress rehearsal attendance, reflections, and evaluations). In addition to the required concerts, the course instructor will identify opportunities for students to participate in choral and musical activities or attend professional performances during the school year.

MU210Q, MU212Q SYMPHONIC BAND
Prerequisite: None
1 Credit: 2 Semesters

This band composed of 10th and 11th grade students who have had previous band experience. It meets every other day throughout the school year. During the first term, emphasis is on preparation for marching band performances at home football games. This includes evening rehearsals which are scheduled in advance. In the first and second term, students perform in several concerts, participate in the solo ensemble festival and receive a private or small group lesson. Practice time outside of class is required and considered vital to the students' continued growth on their instruments. Students also have the option of participating in the Pep Band which performs at a number of home athletic events. In addition, members perform in conjunction with the Wind Ensemble at graduation.
MU220Q, MU222Q WIND ENSEMBLE  
Prerequisite: Junior or Senior standing  
1 Credit: 2 Semesters  

This ensemble is composed of select musicians from the 11th and 12th grades who have demonstrated the necessary musicianship to perform more advanced works for wind ensemble or full band. It meets every other day throughout the school year. During the first term, emphasis is on preparation for marching band performances at home football games. This includes evening rehearsals which are scheduled in advance. In the remaining first and second term, students perform in several concerts, participate in the solo/ensemble festival and receive a private or small group lesson. Practice time outside of regular rehearsal time is vital for meeting obligations of the group and continued development on one’s instrument. Students also have the option of participating in the Pep Band which performs at a number of home athletic events. In addition members of the Wind Ensemble perform at graduation.

MU240Q, MU242Q CHAMBER STRINGS  
Prerequisite: None  
1 Credit: 2 Semesters  

This orchestra is in its first year (2014-2015) and will be composed of 9th grade students. Students do not have to have prior string experience, but must have the consent of the teacher if they have not previously played. Beginning students may be 9th-12th grade students. Orchestral instruments are violin, viola, cello and string bass. Orchestra will meet on B days for the school year. Concerts will be given 3-4 times a year and students will participate in solo/ensemble contest in March and other opportunities as they arise. Practice outside of the classroom is required and considered a vital step in the students’ growth and commitment on their instrument.

MU340Q, MU342Q PHILHARMONIC ORCHESTRA  
Prerequisite: None  
1 Credit: 2 Semesters  

This orchestra will be composed of 10th - 12th grade students who have demonstrated the appropriate skills to perform more advanced orchestral music. Orchestral instruments are violin, viola, cello and string bass. Piano and harp are a possibility. Orchestra will meet on A days for the school year. Concerts will be given 3-4 times a year and students will participate in solo/ensemble contest in March and other opportunities as they arise. Practice outside of the classroom is required and considered a vital step in the students’ growth and commitment on their instrument.

MU2301 EARLY BIRD JAZZ ENSEMBLE  
Prerequisite: Consent of the director.  
1/2 Credit: 2 Semesters  

This is an opportunity for students serious about jazz to perform literature of all styles at a more advanced level. The group meets two mornings a week from 7:00 A.M. - 7:50 A.M. Smaller combos are also offered and encouraged as an extension of this ensemble. Students participate in concerts that are held throughout the year as well as a number of jazz festivals.
MU2302 SECOND LAKE JAZZ ENSEMBLE
Prerequisite: By audition only
½ Credit: 2 Semesters

The Second Lake Jazz Ensemble is an ensemble for advanced instrumentalists to perform challenging jazz repertoire. Membership and placement in this ensemble is determined by audition only (at the conclusion of the marching season). The group meets weekly on Wednesday nights from 6:30 P.M. - 8:00 P.M. Additionally, weekly sectionals may be required after school on a day mutually agreed upon by the members of the section and the director. Topics beyond performance will be jazz style, theory, history, and improvisation. Smaller combos are also offered and encouraged as an extension of this ensemble. Students will participate in concerts and Solo/Ensemble and may also perform at community events and jazz festivals.

MU2400 MUSIC THEORY
Prerequisite: Sophomore, Junior, or Senior standing and instructor consent.
½ Credit: 1 Semester

This college-prep course is designed to provide students with a strong basis of music fundamentals, including ear training skills, sight reading skills, and music theory analysis. Students will learn how to analyze and discuss music on a technical level, and will gain knowledge including but not limited to: intervals and scales, seventh chords and inversions, voice leading and counterpoint, harmonic analysis, chord symbols, and music technology. Additional computer resources and websites will offer students enriched learning opportunities. This course is highly recommended for any serious musician.

MU250Q, MU252Q A CAPPELLA CHOIR
Prerequisite: Junior or Senior who received a B or better in previous choir.
Sophomore males with instructor consent.
1 Credit: 2 Semesters

A Cappella Choir is an advanced choir for students who have demonstrated the musicianship needed to perform more demanding choral literature. The group performs for the Fall Concert and Spring Concert, as well as a Cabaret/Pops concert in late February. Participation in all concerts is a course requirement. On October 23, A Cappella Choir will participate in the all-choir retreat. Students will return on the evening of October 24. Students are required to attend a minimum of 2 group voice lessons per term and complete intermediate music theory and literacy assignments. Students from this group may also be selected to perform at various Choral Festivals and/or in the WSMA Honors Mixed or Treble Choir. Grading is assessed based on music literacy (music reading, theory, and ear training), rehearsal skills (participation, writing activities, and conduct), and performance assessment (concert and dress rehearsal attendance, reflections, and evaluations). In addition to the required concerts, the course instructor will identify opportunities for students to participate in choral and musical activities or attend professional performances during the school year.
MU2350. BLUE NOTES VOCAL JAZZ/CONTEMPORARY A CAPPELLA ENSEMBLE
Prerequisite: By audition and must be a member of a performing ensemble
\( \frac{1}{2} \text{ Credit: 2 Semesters} \)

This is an opportunity for advanced choir students to perform vocal music at a high level. The group focuses on vocal jazz as well as contemporary popular a cappella. Blue Notes is by audition only, and requires music reading skills, developed vocal technique, and advanced musicianship. The group meets Monday afternoons from 3:25 - 4:30 and Thursdays during lunch. Students participate in concerts held throughout the year, the Solo & Ensemble Festival, and numerous community events. Outside practice is required and extra performances for the community will be expected throughout the year. Auditions are held during the first week of school.
The McFarland High School Physical Education program is designed to be a sequential process in which students become more knowledgeable about themselves and their own individual strengths, limitations and uniqueness. A variety of activities are offered at each grade level to make for a well rounded individual and to increase one's personal, physical, mental and social wellness. The units may be of an individual, dual, team, recreational or leisure time activity, but they are the vehicles used to increase or enhance an individual's cardio-vascular fitness, strength, agility, flexibility, eye-hand coordination and personal body awareness. A sense of fair play, understanding, teamwork and sportsmanship is also stressed. Attendance, personal effort to improve and written knowledge are keys to being successful. Specific unit offerings will vary according to class size, seasonal conditions, and availability of resources. All units include daily time allotment in strength training or cardio-vascular, flexibility and aerobic exercises. Some fees may apply for certain units.

PE1020 PHYSICAL EDUCATION 9
Prerequisite: None
1/2 Credit: 1 Semester
Fee: $12.50

Personal fitness covers fundamental topics in health-related fitness. It encourages students to develop an individual optimum level of physical fitness and acquire knowledge of physical fitness concepts. The program also emphasizes individual personalities and attitudes to keep students involved in the learning process. An effort is made to have the student understand the reason for, value of, and current techniques of many basic skills. Special emphasis is placed on orientation rules and safety procedures. It is the foundation of the McFarland High School Physical Education Program. Future successes may be based on the 9th grade experience.

PE2010 PHYSICAL EDUCATION 10
Prerequisite: None
1/2 Credit: 1 Semester
Fee: $15.00

The sophomore level is a progression from the freshmen experience. The student is expected to advance in the fundamental skills and knowledge of various individual, dual and team sports. More advanced techniques and precision movements are incorporated in all activities to raise the level of awareness and improvement in the student. Continued stress is placed on the physical, mental and social aspects of the individual.

The junior-senior elective physical education program has been established to allow students to choose their own physical educational outcome. Students at the junior-senior level have the opportunity to choose between three classes. These classes include Lifetime Fitness, Team and Individual Sports and Strength and Speed Improvement. The elective approach allows students to choose a path that they may partake in after their high school years.
PE4010 LIFETIME FITNESS  
Prerequisite: Junior or Senior Standing  
1/2 Credit: 1 Semester  
Fee: $15.00  

This class is an introduction to general fitness principles and techniques that the student can take with them through life. The students will work on improving overall fitness through activities that will help them build strength, endurance and flexibility. The students should come to class prepared to get their heart rate up every day through a variety of activities. The activities include but are not limited to: Swimming, aerobics, weight training, speed walking, running, circuits, fitness through sport amongst other fitness related activities. Interested students must be prepared to work hard and be self-motivated to achieve a high grade in this class.

PE4020 STRENGTH & SPEED IMPROVEMENT (S.S.I)  
Prerequisite: Junior or Senior Standing  
1/2 Credit: 1 Semester  
Fee: $5.00  

This course will take the students beyond the basic strength and conditioning materials covered in freshman and sophomore P.E. and will focus primarily on strength and body condition development. Students that participate in this course will come out with a tremendous understanding of the various lifts and the muscle groups they target. Students will also participate in various conditioning activities to help improve upon his or her flexibility, agility, cardiovascular and strength condition.

PE4030 TEAM AND INDIVIDUAL SPORTS  
Prerequisite: Junior or Senior Standing  
1/2 Credit: 1 Semester  
Fee: $25.00  

The activities that are offered in this course would be an expansion of what was introduced at the freshman and sophomore levels. This course is for the student who really enjoys the spirit of competition and loves to participate as part of a team. The outcome of this course is to expose students to the enjoyment of recreational team and individual activities in hopes that they will participate in them following high school.
SCIENCE

SC2001 BIOLOGY I
SC2002 BIOLOGY II
SC1003 ADVANCED BIOLOGY I
SC1004 ADVANCED BIOLOGY II
SC1001 PHYSICAL SCIENCE - CHEMISTRY
SC1002 PHYSICAL SCIENCE - PHYSICS
SC3001 CHEMISTRY I
SC3002 CHEMISTRY II
SC3110 ENVIRONMENTAL SCIENCE
SC3121 WEATHER, CLIMATE & THE OCEAN
SC3190 BIOTECHNOLOGY
SC3310 SPACE SCIENCE
SC4001 PHYSICS I
SC4002 PHYSICS II
SC4130 HUMAN ANATOMY & PHYSIOLOGY
SC5001 AP PHYSICS I
SC5002 AP PHYSICS II
SC5005 AP CHEMISTRY I
SC5006 AP CHEMISTRY II
SC5007 AP BIOLOGY
SC5008 AP BIOLOGY
SC4200 MEDICAL TERMINOLOGY

SC2001 & SC2002 BIOLOGY I AND II
Prerequisite: None
Lab Supply Fee: None
1 Credit: 2 Semesters (can count as a science biology graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Biology starts with an exploration of basic science skills, including experimental design and analysis. Subsequent units focus on the basic characteristics of living things: cell biology, gaining and metabolizing energy, DNA and cell division, genetic diversity and the evolution of life, and ecology. Students will work throughout the year to master the skills of evidence-based claims and scientific reasoning.
**SC1003 ADVANCED BIOLOGY I**
Prerequisite: None
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science biology graduation credit)
NCAA Clearinghouse Approved
UW Madison Core Credit

The first semester of Advanced Biology starts with an exploration of basic science skills including experimental design and analysis. We then learn the basics of cell biology, the structure and function of DNA including protein synthesis, cell division, and the human genome. Students who choose Advanced Biology should be prepared to learn material at a faster pace with less time spent on repetition. The faster pace allows for more time to delve deeper into some topics and to explore the scientific inquiry process through labs and writing lab reports. Successful students will have excellent organizational skills and be motivated and independent learners.

**SC1004 ADVANCED BIOLOGY II**
Prerequisite: Biology I or Advanced Biology I
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science biology graduation credit)
NCAA Clearinghouse Approved
UW Madison Core Credit

Topics covered in the second half of Advanced Biology will include the chromosomal basis of inheritance, population genetics and evolution, and topics within ecology such as the production and flow of energy through biological systems. Students who choose Advanced Biology should be prepared to learn material at a faster pace with less time spent on repetition. The faster pace allows for more time to delve deeper into some topics and to explore the scientific inquiry process through labs and writing lab reports. Successful students will have excellent organizational skills and be motivated and independent learners.

**SC1001 PHYSICAL SCIENCE - CHEMISTRY**
Prerequisite: None
Lab Supply Fee: None
0.5 Credit: 1 Semester (can count as a science chemistry graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is designed to provide all students with an introduction to chemistry. This includes types of atomic structure, introduction to the periodic table, chemical bonding and chemical reactions. The course has been designed to be a hands-on, lab-based course that emphasizes applications of chemical principles in the real world. This satisfies the chemistry graduation requirement. Students may choose to continue their chemistry education by taking Chemistry I and II.
SC1002 PHYSICAL SCIENCE - PHYSICS
Prerequisite: None
Lab Supply Fee: None
0.5 Credit: 1 Semester (can count as a science physics graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course is designed to provide all students with an introduction to physics. This will include investigating forces, motion, energy, light, and sound. The course has been designed to be a hands-on, lab-based course. Students may choose to continue their physics education by taking Physics I and II.

SC3001 CHEMISTRY I
Prerequisite: Successful completion of Biology I & II or Advanced Biology I & II (Previous experience in Algebra and a biology teacher recommendation over Physical Science - Chemistry is strongly recommended)
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science chemistry graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This is an introductory, lab-based, course intended to provide students with a firm understanding of scientific investigation and reasoning, laboratory practices, and scientific numeracy skills through the realm of chemistry. Students will learn a variety of content specific to physical science and chemical processes that will help them better understand science and how chemistry impacts their lives. They will develop and utilize problem solving skills while mastering chemical concepts, including: the nature of science, laboratory practices, atomic theory & structure, chemical bonding, molecular formulas, and particle quantification.

Chemistry I is intended to prepare students with the knowledge and skills required for successful completion of Chemistry II. Subsequent completion of Chemistry II is highly recommended for post-secondary preparation.

SC3002 CHEMISTRY II
Prerequisite: Successful completion of Chemistry I
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science chemistry graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This is an introductory, lab-based, course intended to provide students with a firm understanding of scientific investigation and reasoning, laboratory practices, and scientific numeracy skills through the realm of chemistry. Students will learn a variety of content specific to physical science and chemical processes that will help them better understand science and how chemistry impacts their lives. They will build upon and explore problem solving skills while mastering chemical concepts, including: chemical reactions, quantification of theoretical yields, gas laws, solution chemistry, and thermodynamics.

Chemistry II is intended to prepare students with the knowledge and skills required for post-secondary education and is especially suggested for those interested in pursuing careers in a science or health field.
**SC3110 ENVIRONMENTAL SCIENCE**
Prerequisite: Completion of a full year of Biology or Advanced Biology.
Lab Supply Fee: $7.50
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Students in Environmental Science will explore the science behind many current environmental issues. The course includes units about biodiversity loss, soils and agriculture, surface water and toxic chemicals, climate change and energy sources, and a brief discussion of human population growth. The course includes walking field trips to the school forest (Indian Mound Park) and the Yahara River to complete labs when weather allows.

**SC3121 WEATHER, CLIMATE & THE OCEANS**
Prerequisite: None
Lab Supply Fee: $7.50
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit - Pending

The World's Oceans compose 71% of the surface of the earth. This course will first look at Oceanography, which is an interdisciplinary science that draws on the methods and knowledge of geology, chemistry, physics and biology. Oceans in turn influence our weather and climate in dramatic ways. Weather impacts our everyday activities, jobs, health and comfort. This is particularly true in the United States as we have the greatest variety of weather of any country in the world. Beyond its direct impact on the lives of individuals, the weather has a strong effect on the world economy by influencing agriculture, energy use, water resources, transportation, and industry.

**SC3190 BIOTECHNOLOGY**
Prerequisite: Successful completion of both semesters of Advanced or Regular Biology. Enrollment in chemistry is recommended.
Lab Supply Fee: $25.00
1/2 Credit: 1 Semester

This course presents the current research regarding DNA. It includes an in depth study of DNA manipulation (DNA isolation, replication, and identification) and proteomics (protein synthesis, epigenetics, and quantification). Many ethical issues are discussed and debated, and active class participation is a must. This is a high level lab course. Students are asked to purchase a $3.00 lab notebook in which to record their laboratory results.
SC3310 SPACE SCIENCE
Prerequisite: Competence in Geometry
Lab Supply Fee: $7.50
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Space Science is an introductory survey course in astronomy and space exploration. It covers the history and development of astronomy from early man to the present. The course begins by providing students with an understanding of what we see in the sky from earth, including star positions and lunar phases. From there, the course takes a comprehensive look at our solar system and astrobiology. We then look at the universe at large—how did it start and how will it end? The semester course ends with a unit on modern space exploration and space mission design.

SC4001 PHYSICS I
Prerequisite: Competence in trigonometry and algebra
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science physics graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

The first two-thirds of this course covers one-dimensional and two-dimension motion (kinematics). Students will investigate speed, velocity, and acceleration. The last portion of this course will cover forces (dynamics). Students will investigate Newton’s Laws of Motion. A graphing calculator is highly suggested.

SC4002 PHYSICS II
Prerequisite: Competence in trigonometry and algebra and Physics I
Lab Supply Fee: $7.50
0.5 Credit: 1 Semester (can count as a science physics graduation credit)
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course covers three main topics energy and momentum, sound, and light. Students will investigate the Law of Conservation of Energy and the Law of Conservation of Momentum. Students will also investigate the properties of vibrations of waves (both light and sound). Lastly, students will investigate the refraction and reflection of light. A graphing calculator is highly suggested.
**SC4130 HUMAN ANATOMY & PHYSIOLOGY**
Prerequisite: Successful completion of both semesters of Advanced or Regular Biology. Enrollment in chemistry is recommended.
Lab Supply Fee: $25.00
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Students will learn the major systems of the body; in particular, they will learn the major processes that occur in each system. Students will also learn about cells, their role as the basis of life, and the diversity of cells within the human body. Finally, students will be required to dissect a cat in order to explore the systems of the human body.

**SC5001, SC5002 AP/CAPP PHYSICS I and II**
Prerequisite: Completion of Physics I
Lab Supply Fee: $15.00
1 Credit: 2 Semesters: Grade Weighted
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

An intensive 2 term 1 credit Physics course designed for the self-motivated student and intended as a preparation for the AP Physics 1 and 2 exams. Extensive laboratory and analytical work will be a normal part of the class. Topics will include: mechanics, electricity and magnetism, kinetic theory and thermodynamics, waves and optics and modern physics. Students will have the opportunity to take the AP exam. Students also have the opportunity to enroll in the Cooperative Academic Partnership Plan (CAPP) program and receive college at UW-Oshkosh. Students pay $450 per semester for five credits. There are eligibility requirements to enroll in the CAPP program.

**SC5005 & SC5006 AP CHEMISTRY I and II**
Prerequisite: Highly successful completion of Chemistry I & II courses as well as a sound understanding of Algebra 2 topics
Lab Supply Fee: $30.00
1 Credit: 2 Semesters: Grade Weighted
NCAA Clearinghouse Approved

AP Chemistry is a college level course that is designed to be taken after the completion of Chemistry I & II. The structure and content of the course is guided by the AP College Board, with specific emphasis on analytical and critical problem solving through inquiry based laboratory explorations. Topics that will be covered include those discussed at an introductory level in general chemistry as well as: RedOx reactions, thermodynamics, equilibrium, kinetics, organic chemistry, and acid/base reactions. Students are encouraged to participate in the AP examination in May to earn college credit for successful exam performance. The course fee covers laboratory reagents, equipment and notebooks but does not cover the cost of the AP exam.
SC5007 & SC5008 AP BIOLOGY I and II
Prerequisite: Successful completion of both semesters of Biology and Chemistry.
Lab Supply Fee: $35
1/2 Credit: 1 Semester

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. The course is based on four Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. Students that successfully pass the AP examination in May will earn college credits.

SC4200 MEDICAL TERMINOLOGY (formerly Health Sciences)
Prerequisite: Junior or Senior standing
Registration Fee: $55.00
1/2 Credit: 1 Semester
THIS COURSE IS NOT NCAA CLEARINGHOUSE APPROVED nor DOES IT COUNT TOWARDS A SCIENCE GRADUATION CREDIT

The words - or terms - which make up the language of medicine are referred to as the terminology of the medical field, or Medical Terminology. This course focuses on communication using the medical language. We will analyze medical terms using work components and classify terms by the structural organization of the body. Both the written and spoken formats for using language will be addressed, including work construction, definition, spelling, and pronunciation of medical term and the interpretation of written materials.

The course fee provides access to the on-line module required through MATC. Purchase of a textbook requires added cost. The textbook is not required, but is a helpful educational resource.
Students who successfully complete the coursework are eligible for three dual credits with MATC for Medical Terminology.

PRINCIPLES OF ENGINEERING IS AN ACCEPTED SCIENCE ELECTIVE COURSE

TE1010 & TE1011 PLTW: PRINCIPLES OF ENGINEERING (POE)
Prerequisite: Algebra 1, Sophomore Standing (Grades 10 - 12)
1 Credit: 2 Semesters
This course qualifies for third year science elective

This introductory course explores the wide variety of careers in engineering and technology and covers various technology systems and manufacturing processes. Using activities, projects, and problems, students in POE will learn firsthand how engineers and technicians use math, science, and technology in an engineering problem-solving process to benefit people. POE also addresses concerns about social and political consequences of technological change.

This is a pre-engineering course following the nationally approved Project Lead the Way curriculum. POE will require the use of advanced math principles.
SS1011 & SS1012 United States History 9
SS2001 & SS2002 World History
SS3010 Economics
SS3030 Political Science
SS3040 International Relations
SS3110 World Geography
SS3060 Global Diversity
SS4010 Sociology
SS4030 Psychology
SS4060 Social Studies Seminar
SS5000 AP United States Government

SS5100 & SS5110 AP Psychology
SS5201 & SS5202 AP United States History
SS5300 & SS5301 AP European History
SS3014 & SS3015 AP Economics

SS1011 & SS1012 UNITED STATES HISTORY 9
Prerequisite: Required of all freshmen
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course continues the chronological series from eighth grade. Beginning with the settlement of the Old West and continuing with the modernization of America through the industrialization and urbanization of our country, we examine how the US became the world power that it is today. The relationship between the United States and the other nations is a key component, as the world becomes more interdependent. Emphasis is also placed on current issues and the skills necessary to arrive at informed judgment.

SS2001 & SS2002 WORLD HISTORY
Prerequisite: Required of all sophomores.
1 Credit: 2 Semesters
NCAA Clearinghouse Approved, Accepted as U.W. Madison Core Credit

This is a year-long course, and each semester covers different topics in World History. The first semester is a survey of the major developments in modern European history, starting with the Renaissance and ending with the French Revolution. The focus is on the shifts in political, social, and religious thought that helped shape our current world. The second semester takes a "regional studies" approach, with discussion of recent history and current problems in Asia, Latin America, Africa, and the Middle East. Overall, the course intends to prepare students to be "global citizens" in the 21st century.
SS3010 ECONOMICS
Prerequisite: Required of all juniors
NCAA Clearinghouse Approved
1/2 Credit: 1 Semester

This semester course provides students with the theoretical foundations and functional knowledge in economics needed to become informed consumers, producers, and citizens in today’s world. Economics is the study of how individuals, businesses, and governments make decisions about the use of scarce resources in a world of unlimited wants and needs—the course examines these issues at both the microeconomic and macroeconomic levels. The course is useful in helping students to acquire many life skills, and also in establishing a foundation for a more advanced study of economics.

SS3030 POLITICAL SCIENCE
Prerequisite: Required of all juniors
NCAA Clearinghouse Approved
1/2 Credit: 1 Semester

In this one term course, students will have the opportunity to actively participate in democratic practice. Beginning with an examination of the principles of government, students will then study the practical application of these principles at local, state, national and international levels. Through simulation, debate, and a critical examination of the historical documents that still govern our society today, students will learn to understand different points of view and reach conclusions. The goal of the course is to expand students’ skills and civic intelligence in order that they may become active and effective participants in the public life of the country and in an increasingly global society.

SS3040 INTERNATIONAL RELATIONS
Prerequisite: None
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This elective class is designed for students who are curious about the world, and enjoy the challenge of critical thinking. The impact of unfolding world developments and international political conflict is the heart of the course. That said, there is a daily emphasis on current events, especially as they relate to the US government’s foreign policy goals and strategies, the role of international and regional organizations, and their impact on our daily lives. Through discussion, collaboration, debate and role play, the curriculum is designed to actively engage students in their learning with the goal of making complex international issues understandable and meaningful. Ultimately, students are able to analyze and evaluate multiple perspectives on an issue and to form opinions on US foreign policy options that reflect their own values and goals.
SS3110 WORLD GEOGRAPHY
Prerequisite: None
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This course offers students a greater understanding of the nations and people of our world and emphasizes how the individual student fits into this Global Community. We first focus on the five themes of geography: Location, Place, Human/Environment Interaction, Movement and Region, and move on to regional geographical studies. Together with geographical studies, we examine major themes/problems facing the planet today including overpopulation, natural resources & weather, water issues, development, conservation, & environmental concerns, etc.

SS3060 GLOBAL DIVERSITY
Prerequisite: None
½ credit: 1 semester

This course aims to help students become better aware and more tolerant of cultures and people who differ from themselves. Students will be able to understand the meaning of "culture." They will be able to define what makes up their own culture and how it differs from others. They will examine African American and Native American cultures as well as the Women's Movement and Civil Rights. Students will also learn about world religions and their influence on history, as well as about the role of gender and sexual orientation. They will experience the class through readings, plays, projects, field trips, speakers, music, and food.

SS4010 SOCIOLOGY
Prerequisite: None
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

In Sociology, the student is introduced to the study of social theory and social problems. To help the student understand the complex cause and effect relationships in the nature of social life, emphasis is given to those basic concepts and principles necessary to understand the organization and operation of the social world. To assist students to grow in the ability to think clearly and consistently, the basic continuing features of organized social life and the long-term trends of social change are emphasized. The scientific approach is pursued as the student carries out social research in many areas, such as social interaction, social organization, social systems, social changes, and social institutions.
SS4030 PSYCHOLOGY
Prerequisite: None
1/2 Credit: 1 Semester
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

What could possibly be more interesting than you? This introductory course will explore your behavior, your motivations and emotions, and your personality. We will explore how you learn and remember, how you have developed intellectually and socially since infancy, and how you will continue to change throughout adulthood and old age. We will also look at some of the causes and treatments of psychological disorders such as phobias, schizophrenia, depression, and eating disorders. We will also explore the teenage brain...among others.

SS4060 SOCIAL STUDIES SEMINAR: Sports and Society (offered 2016-17 only)
Prerequisite: None
1/2 Credit: 1 semester

Do you like sports? If so, you’re one of 4 billion people in the world who do. But there’s a lot more to sports than just cheering for your team (the Green Bay Packers) to beat everyone else. Sports have a way of uniting people, while also radically dividing them. What makes sports so popular? How do sports shape society? We will attempt to answer these questions, while also demonstrating the lasting mark that sports have left on our contemporary culture.

SS5000 AP UNITED STATES GOVERNMENT
Prerequisites: Junior or senior standing, successful completion of Political Science
NCAA Clearinghouse Approved
1/2 Credit: 1 Semester: Grade Weighted

AP United States Government is an elective course for juniors or seniors who have successfully completed Political Science and would like to extend their studies of American government. Topics of this course will include the origins of the American political system, political beliefs and behaviors, interest groups, public policy, civil liberties, and Supreme Court rulings. This rigorous course is designed to prepare students for the AP exam in May.

SS5100 & SS5110 AP PSYCHOLOGY
Prerequisite: Completion of Psychology recommended
NCAA Clearinghouse Approved
1 Credit: 2 Semesters: Grade Weighted

Advanced Placement Psychology is the equivalent of a college introductory psychology course. This is a rigorous and demanding course with a heavy emphasis on essential readings, writing assignments, independent projects, and frequent tests and quizzes intended to prepare students for the AP Exam in May. It is recommended that students purchase the study guide to accompany the textbook for approximately $30.00
**SS5201 & SS5202 AP UNITED STATES HISTORY**  
Prerequisite: Successful Completion of US History 9  
NCAA Clearinghouse Approved  
1 Credit: 2 Semesters: Grade Weighted

This elective is designed for serious college-bound students interested in American History. The program will provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history. This course should provide the student with a learning experience equivalent to that obtained in most college introductory United States history courses. Students will be encouraged to take the AP Exam upon completion of the course.

**SS5300 & SS5301 AP EUROPEAN HISTORY**  
Prerequisite: Successful Completion of World History 10  
NCAA Clearinghouse Approved  
1 Credit: 2 Semesters: Grade Weighted

AP European History is an elective course designed for the intellectually curious student who is looking to explore history from a non-United States perspective. AP European History will not only illustrate the manner in which European History influenced our own; it will provide students with a broader world-view and a better understanding of events that still shape our world today. Students who are up to a challenge will find the course provides an excellent historical base, particularly for those students that are college bound. Students are encouraged to take the AP European History Exam upon completion of the course.

**SS3014 & SS3015 AP ECONOMICS**  
Prerequisite: Senior Standing  
NCAA Clearinghouse Approved  
1 credit: 2 Semesters: Grade Weighted

This college level survey course is for seniors who have already taken Economics. We will explore in-depth topics about the role of the government in the economy, the way that businesses operate, and how individuals and groups make decisions. A major theme of this course will be applying rational economic thought to contemporary problems. We may not be able to solve global poverty, climate change, and civil unrest, but we’ll give it our best shot.
TECHNOLOGY AND ENGINEERING

TECHNOLOGY
TE1001 & TE1002 Intro to Technology
TE2010 Basic Woodworking
TE2030 Cabinetry
TE3110 Advanced Cabinetry
TE2050 Basic Metals Process
TE2050 Advanced Metals Process
TE2070 Metal Fabrication and Design
TE3020 Construction Skills
TE3030 Building Trades
TE4100 & TE4101 Video Engineering

AUTOMOTIVE TECHNOLOGY
*TE3060 Air-Cooled Engines
*TE3080 Basic Automotive
*TE3100 Automotive Technology
*TE3200 Automotive Service
TE4010 Consumer Auto/Home

ENGINEERING
TE1005 & TE1006 Intro to Engineering Design (IED)
TE1010 & TE1011 Principles of Engineering (POE)
TE3150 & TE3151 Digital Electronics (DE)
TE3160 & TE3161 Engineering Design & Development (EDD)
TE3170 & TE3171 Civil and Architectural Engineering (CEA)

*McFarland High School and MATC have a certification/advanced standing agreement for these courses

TECHNOLOGY EDUCATION FEES: Students are expected to pay for materials used to construct projects and parts for engines. Students will be required to purchase safety glasses.

TE1001 & TE1002 INTRO TO TECHNOLOGY
Prerequisite: None
1 Credit: 2 Semesters
This course is designed to allow all students to explore what MHS Technology & Engineering has to offer, with an emphasis on planning and problem solving. Many units are designed to support and reinforce concepts learned in Physical Science.
In the first term of “Intro to Technology” students will learn about areas of technology through week long hands-on lab projects. These projects will utilize the tools and materials found in different Technology laboratories. Activities will include a Paper Car project, a Wood Truss Design and Construction project, an Electricity Project, a Hydraulics/Pneumatic project and at least one Design Challenge Project.
In the second term of “Intro to Technology” students will expand their understanding of Technology and Engineering by engaging in a large individual project that incorporates Research, Design, and Development/Fabrication. Students will learn to use a Computer Aided Design program, measurement, and material manipulation utilizing the tools and materials available in the Technology laboratories.

TE2010 BASIC WOODWORKING
Prerequisite: Sophomore standing (Grades 10-12)
1/2 Credit: 1 Semester
In Basic Woodworking students will learn the basics of wood materials, forestry, engineered wood products, wood manipulation, and how to safely operate various tools related to woodworking. Students will also learn basic project planning, cost estimating, wood joinery, and finishing. The student will construct several assigned projects during the semester with different form, function, and style designed to provide the students with a broad range of woodworking experience.
TE2030 CABINETRY
Prerequisite: a "C" or better in Basic Woodworking
1/2 Credit: 1 Semester

In Cabinetry, the student will learn the complete operation, parts, and adjustments on the woodworking machines in the lab. The student will gain a more in-depth knowledge of the woodworking tools, techniques, and materials above the basic or beginner level. This means students will experience larger projects, more in-depth planning / design, better materials, complex tool setups, and complex joinery. The student will gain this experience through the construction of a larger piece of furniture suitable to their skill level and the time constraints of the class.

TE3110 ADVANCED CABINETRY
Prerequisite: A "C" or better in Cabinetry
1/2 Credit: 1 Semester

Advanced Cabinetry is a course designed for students in grades 11 and 12 as a capstone project based class. The students will design and build an approved project that is consistent with their skill level. Special topics of interest will be discussed. The topics will include custom cabinet-making joints, veneering and inlaying, nature and properties of wood, kinds of wood, fine furniture woods, and other appropriate topics. The class will also include a field trip to the National Forest Products Laboratory in Madison. Some students' projects may also be entered and displayed at the State Skills U.S.A. woodworking competition.

TE2050 BASIC METALS PROCESS
Prerequisite: Sophomore standing (Grades 10-12)
1/2 Credit: 1 Semester

This is a course in which students will learn basic skills and knowledge related to cutting, machining, and welding applications. Welding and cutting skills will be developed in the context of a series of projects. Combined with the second year course, Advanced Metals Process, the student should be able to explain and perform American Welding society standards and procedures.

Areas to be covered in the course are:
1. Basic lathe operation
2. Basic arc welding techniques and positions
3. Oxy-acetylene welding techniques
4. Metal casting techniques
5. Metal fabrication techniques
6. Basic milling operation

Related information units will be assigned as required. Students will be required to pay for all consumable materials utilized in personal project activities.
TE2070 ADVANCED METALS PROCESS  
Prerequisite: a "C" or better in Basic Metals Process  
1/2 Credit: 1 Semester  

This course emphasizes the metals process through welding, oxygen-acetylene welding, Tungsten inert Gas welding, and gas metal arc welding. This is a hands-on course where students will be allowed to develop advanced skills in the field of welding. Students will also be allowed to work on school or personal projects that they design with instructor approval. Areas of instruction to be covered are:  
1. Milling machine technology and operation [CNC, CAM]  
2. Advanced welding processes (MIG, TIG, Plasma Arc)  
3. Advanced lathe operations  
4. Heat treatment and case hardening of steel  
5. Advanced SMAW, OAW.

TE3130 METAL FABRICATION & DESIGN  
Prerequisite: A "C" or better in Advanced Metals Process  
1/2 Credit: 1 Semester  

This class is open only to students with a specialized skill interest related to the areas of metals technology. A pre-planned activity structured for the individual student has to be approved prior to the start of production. Students need to take Metal Fabrication & Design the same hour/period as Basic Metals Process and Advanced Metals Process. Students are required to pay for all project material.

TE3020 CONSTRUCTION SKILLS  
Prerequisite: Sophomore, Junior, and Senior standing  
½ credit: 1 Semester  

Construction Skills is the first course of a new two course (building trades would be second) construction track for students to take at McFarland High School. Construction Skills will focus on the basics that students need to know if they are considering a career in construction or if they simply would like to learn more about what it has to offer. With the recession over, well-paying construction jobs are on the rise and employers are having a tough time filling positions. This course when combined with Building Trades will give students the opportunity to become NCCER Certified (National Center for Construction Education and Research). It also offers the possibilities of going into the youth apprenticeship program.

TE3030 BUILDING TRADES (Construction)  
Prerequisite: Sophomore standing and completion of Construction Skills  
1/2 Credit: 1 Semester  

Building Trades is an "advanced" class in which a special emphasis is placed on basic framing procedures. Information is given on how to use both hand and power tools correctly and safely. The student will learn the use and care of the level and level-transit which are commonly used in layout construction work. Platform framing, which is used for most modern residential construction will be explained and worked on in class. The student will learn how to frame a window and door opening, how to hang the door and install the lock and latch. Roof types and pitch, common rafters, and roofing materials will be discussed. One project will be built by the class applying the knowledge they have gained.
TE4100 & TE4101 VIDEO ENGINEERING
Prerequisite: None - Grades 9-12
1 Credit: 2 Semesters

This is a hands-on Video Communications course where all students in the class will learn how to write, edit, produce, and present a variety of topics. These topics will be decided upon based on group input, current issues throughout the school, community, and/or the world and will be written in script/storyboard form prior to production. This course will include both live production techniques with very little post-production work, and prerecorded tapings with a large amount of post-production work (computer editing). Students will become familiar with all aspects of production from producer to camera person.

Automotive Technology

TE3060 AIR-COOLED ENGINES
Prerequisite: Sophomore Standing
1/2 Credit: 1 Semester

This class is a study of different types of internal combustion engines, such as Four Stroke, Two Stroke, Diesel & Rotary. The students will be provided a small four-stroke and two-stroke engine to disassemble; examine the parts for wear; reassemble the engine and make the engine run properly. Students will then need to bring in their own small engine (three to eight horsepower) to service. Service may include an external inspection, cleaning and lubrication. Students will be responsible to pay for any parts needed for their engine. Successful completion of Air-Cooled Engines, Basic Auto and Auto Tech can earn students Advanced Standing in the Automotive Technician Program at MATC.

TE3080 BASIC AUTOMOTIVE
Prerequisite: a "C" or better in Air-Cooled Engines
1/2 Credit: 1 Semester

An introductory course for students interested in learning auto technology as a career or hobby. Areas to be covered are: Lubrication, fasteners, wheels & tires, cooling system, brakes, alignment & suspension. Successful completion of Air-Cooled Engines, Basic Auto and Auto Tech can earn students Advanced Standing in the Automotive Technician Program at Madison College.

TE3100 AUTOMOTIVE TECHNOLOGY
This course is required for students participating in the Auto Youth Apprenticeship Program
Prerequisite: A "C" or better in Basic Auto & Junior Standing (Grades 11-12)
1/2 Credit: 1 Semester

This course takes a more in-depth look at the electrical systems of the automobile such as starter & charging systems and lighting. Theory and problem diagnosis will be made using gauges, meters, and computer diagnostic scan tools. It would be advantageous (but not required) for students to have a car to work on during lab exercises. Successful completion of Air-Cooled Engines, Basic Auto and Auto Tech can earn students Advanced Standing in the Automotive Technician Program at Madison College.
TE3200 AUTOMOTIVE SERVICE
This course is required for students participating in the Auto Youth Apprenticeship Program
Prerequisite: A "C" or better in Auto Tech & Junior Standing (Grades 11-12)
1/2 Credit: 1 Semester

Automotive Service is for students who have successfully completed Auto Tech and wish to apply their automotive knowledge and skills to troubleshooting, and repairing "live" vehicles. During this class you will be presented with vehicles to diagnose with a customer's complaint. The diagnosis will lead to the preparation of an estimate to determine the cost of repairs. After receiving the customer's approval you will obtain the correct parts and make the necessary repair. In addition you will continue advancing your knowledge in the four main ASE certification areas of Brakes; Steering & Suspension; Electricity and Electronics; and Engine Performance.

TE4010 CONSUMER HOME & AUTO MAINTENANCE
Prerequisite: Senior standing or instructor approval
1/2 Credit: 1 Semester

Home maintenance is for the individual faced with repair and maintenance problems around the house. Some of the topics covered will be plumbing, dry wall, doors, insulation, and carpentry repairs. The student will also develop a list of tools for home use and learn how to use them properly. Consumer Auto is designed to help the student understand his/her car. The student will learn how to change oil, filters, and perform simple maintenance procedures. Students will understand the buying, financing, and insuring of a car.

Computer Courses

CS2010 COMPUTER APPLICATIONS 1
Prerequisite: None - THIS COURSE IS REQUIRED FOR GRADUATION.
1/2 Credit: 1 Semester

The Computer Applications 1 course will teach students how to effectively use a computer. Students will have the opportunity to develop skills using the Windows platform and will also have experience using Microsoft Word, Access, Excel, PowerPoint, and Publisher. A competency test option is available upon request for students who are interested in testing out of this course. Inquiries should be made to a student’s guidance counselor. IC3 certification is available.

CS2030 ADVANCED COMPUTERS/MULTIMEDIA PRODUCTION
Prerequisite: Available for sophomore, juniors and seniors
1/2 Credit: 1 Semester

This course is designed to take the students into the area of multimedia production. Using Macromedia's Flash, students will produce animation movies and interactive applications that can be used on the Internet or as standalone applications. Students will work with audiovisual recording and editing. Students taking this class need to be creative and self-motivated.
CS2050 PROGRAMMING
Prerequisite: Computer Science and Software Engineering (CSS)
½ Credit: 1 Semester

This course is a continuation of Computer Science and Software Engineering. Students will learn the fundamentals of programming languages. Object Oriented Programming will be taught using a language called JAVA. It is intended for those students who are interested in pursuing a career in computer programming. The material covered will be excellent preparation for those students who wish to attend either a technical college or university.

CS3020 & CS3022 COMPUTER SCIENCE AND SOFTWARE ENGINEERING (CSS)
Prerequisite: None
1 credit: 2 Semesters

In CSE, students work in teams to develop computational thinking and solve open-ended, practical problems that occur in the real world. They will be introduced to code writing to create interactive Web pages. Students will use face-recognition applications and AppInventor to develop Android apps, while engaging in problems involving social networks, discrete mathematics, cyber-security and eCommerce. Using languages such as Python, students will engage problems involving predictions based on computer models; concepts like probability, chaos, fractals, and artificial intelligence will be developed.

CS2090 WEB DESIGN
Prerequisite: Recommended that you have taken Computer Science and Software Engineering (CSS) but not required.
½ Credit: 1 Semester

This course is meant for students who are interested in a career designing web sites. Web Design will teach you how to build and design websites using HTML and CSS languages. Students will learn to create dynamic web pages using programming languages of JavaScript and PHP along with the database MySQL. Students will learn how to create a Content Management System (CMS) for individuals who have access to the password protected website 'admin' area.

CS3010 COMPUTER LAB SUPERVISOR
Prerequisite: Consent of the Instructor
1/4 Credit: 1 Semester

This is an opportunity for interested students to continue their study of computers on their own time and receive credit for their work. Their primary responsibility will be to supervise the computer lab for a given period and tutor beginning students when necessary. Also computer-related projects will be assigned. There will be no formal presentations but continued study is encouraged and assistance will be provided when needed.
This course will provide an in depth study of servicing personal computers. You will gain a basic understanding of PC hardware, DOS, Windows 9x and Windows NT/2000, networking, printers and troubleshooting. Knowledge will be gained through online instruction, study manual and hands on labs. Practice test will be taken in class. Students successfully completing this course will be able to successfully prepare themselves to take the exams necessary to earn the A+ Certification by Comptia (Computing Technology Industry Association). This certification sets the standard for those working in the personal computer industry as technicians, help desk, and support staff.
Pre-Engineering Courses

The Technology and Engineering Department offers several pre-engineering courses. Students who may be interested in engineering and technology related careers should enroll in any or all of these courses. Through Project Lead the Way, a national organization established to assist schools with pre-engineering curriculum, students are provided with the knowledge and skills to think like an engineer.

The three foundation courses (IED, POE, and DE) offer a college exam at the end of the course. Students earning a B or better in the course and a 70% or better on the college exam are eligible for 3 transcripted college credits per course. For further information regarding these courses please contact Mr. Klecker or Mr. Sukow.

**TE1005 & TE1006 PLTW: INTRODUCTION TO ENGINEERING DESIGN (IED)**
Prerequisite: Pre-Algebra - Grades 9-12
1 Credit: 2 Semesters

Ever tried to design something new or draw up an idea you wanted to share with your friends and wondered how you could communicate your idea? Or, have you wondered how someone designed that new MP3 player or sleek new phone? Then Introduction to Engineering Design ™ is the course for you. The major focus of the course is learning how to take an idea through a design process that will eventually be manufactured or produced. As you learn about various aspects of engineering and engineering design, such as how engineers communicate through drawing, you will apply what you learn through various activities, projects, and problems. The course covers the following:

- The Role of an Engineer
- The Design Process
- Product Design
- Product Analysis and Improvement
- Designing as an Engineer

Students in IED will use a problem-solving model to improve existing products and invent new ones. IED students will learn to use sophisticated three-dimensional modeling software (AutoDesk Inventor) to communicate the details of the products. Emphasis is placed on analyzing potential solutions and communicating ideas to others.

Introduction to Engineering Design ™ is intended to serve as a foundation course within the Project Lead The Way® course sequence. It would be advantageous, but not required to have completed Introduction to Engineering Design prior to POE, DE and IED.
TE1010 & TE1011 PLTW: PRINCIPLES OF ENGINEERING (POE)
Prerequisite:  Algebra 1, Sophomore Standing (Grades 10 - 12)
1 Credit:  2 Semesters
This course qualifies for third year science elective

This introductory course explores the wide variety of careers in engineering and technology and covers various technology systems and manufacturing processes. Using activities, projects, and problems, students in POE will learn first hand how engineers and technicians use math, science, and technology in an engineering problem-solving process to benefit people. POE also addresses concerns about social and political consequences of technological change.

This is a pre-engineering course following the nationally approved Project Lead the Way curriculum. POE will require the use of advanced math principles.

TE3150 & TE3151 PLTW: DIGITAL ELECTRONICS (DE) (Not offered 16-17)
Prerequisite:  Sophomore standing, Algebra 1
1 Credit:  2 Semesters
This course qualifies for third year math elective

Digital Electronics™ is the study of electronic circuits that are used to process and control digital signals. Digital electronics is the foundation of all modern electronic devices such as cellular phones, MP3 players, laptop computers, digital cameras, high definition televisions, etc.

The major focus of the DE course is to expose students to the design process of combinational and sequential logic design, teamwork, communication methods, engineering standards, and technical documentation.

Digital Electronics™ (DE) is a high school level course that is appropriate for 10th - 12th grade students interested in electronics. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge.

Digital Electronics™ is one of three foundation courses in the Project Lead The Way® high school pre-engineering program. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology.

The course of study includes:
- Foundations of Digital Electronics
- Combinational Logic Analysis and Design
- Sequential Logic Analysis and Design
- Introduction to Microcontrollers
TE3170 & TE3171 PLTW: CIVIL AND ARCHITECTURAL ENGINEERING (CEA) (not offered 16-17)
Prerequisite: Sophomore standing, Algebra 1
1 Credit: 2 Semesters

Civil Engineering and Architecture is the study of the design and construction of residential and commercial building projects. The course includes an introduction to many of the varied factors involved in building design and construction including building components and systems, structural design, storm water management, site design, utilities and services, cost estimation, energy efficiency, and careers in the design and construction industry.

Civil Engineering and Architecture is a high school level course that is appropriate for 10th grade or older students interested in careers related to civil engineering and architecture. Other than their concurrent enrollment in college preparatory mathematics and science courses, this course assumes no previous knowledge.

The course of study includes:
- History of Civil Engineering and Architecture
- Residential Design
- Commercial Applications
- Commercial Building Design

TE3160 & TE3161 PLTW: ENGINEERING DESIGN AND DEVELOPMENT (EDD)
Prerequisite: Senior Standing and any of the following classes or combinations listed: IED & POE or DE; or Metals II; or Auto Tech; or Woods II; or higher level math & science.
1 Credit: 2 Semesters

EDD is an engineering research course where small teams of students will work together to research, design, construct and test a solution to an open-ended engineering problem. Students will apply knowledge & principles developed in the preceding engineering courses, previous technology courses or advanced math and science courses.

The product development life cycle and a design process are used to guide and help the team to reach a solution to the problem. 3D Design Software will be used to model solutions to the problem their team has chosen. Students will also look to outside experts to help mentor their work.

This course also engages students in time management and teamwork skills, a valuable tool for students interested in a career in Engineering. Students must document their progress in an engineering notebook, meet deadlines, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year.

CS3020 COMPUTER SCIENCE AND SOFTWARE ENGINEERING (CSS)
Prerequisite: None
1 credit: 2 Semesters

In CSE, students work in teams to develop computational thinking and solve open-ended, practical problems that occur in the real world. They will be introduced to code writing to create interactive Web pages. Students will use face-recognition applications and AppInventor to develop Android apps, while engaging in problems involving social networks, discrete mathematics, cyber-security and eCommerce. Using languages such as Python, students will engage problems involving predictions based on computer models; concepts like probability, chaos, fractals, and artificial intelligence will be developed.
World Languages

FL1001 & FL1002 FRENCH 1
FL1101 & FL1102 SPANISH 1
FL2001 & FL2002 FRENCH 2
FL2101 & FL2102 SPANISH 2
FL3001 & FL3002 FRENCH 3
FL3101 & FL3102 SPANISH 3
FL4001 & FL4002 FRENCH 4
FL4101 & FL4102 SPANISH 4
FL5001 & FL5002 FRENCH 5
FL6001 & FL6002 SPANISH 5

College Retro Credits:

In order to receive college retro credits (college credit granted for work completed in high school) it is highly recommended that students take as many semesters as possible of a World Language. Students taking 5 levels of high school language have been granted as many as 20 college degree credits and have been placed directly into college literature courses. Because the placement exam is usually taken in the spring of the senior year, it is highly recommended that students enroll in the upper level language course during their senior year.

FL1001 & FL1002 FRENCH 1
Prerequisite: none
1 Credit: 2 Semesters
NCAA Clearinghouse Approve
Accepted as U.W. Madison Core Credit

This first level course will begin the process of learning how to communicate in French. The student will develop communicative skills in all areas of learning-speaking, listening, reading and writing. At this level, oral skills are emphasized as the student first develops habits and pronunciation. The course is conducted in French and the student will use the language in class early on. Classroom activities are designed to replicate real life situations. Students will learn how to order food, to talk about themselves, their families and their homes, and where they live. Students will also gain cultural insights about France.

FL1101 & FL1102 SPANISH 1
Prerequisite: None
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

This first level course will use a communicative approach to introduce the student to the language and culture of the Spanish speaking world. The student will develop speaking, listening, reading and writing skills. The course is conducted in Spanish and the student will use the target language in the classroom. Students will learn how to interact in real life situations, how to describe themselves, their friends, and families using the present tense. Students will create dialogues and do short presentations. Students will gain cultural knowledge about the Spanish speaking world.
**FL2001 & FL2002 FRENCH 2**  
Prerequisite: French 1 or consent of instructor  
1 Credit: 2 Semesters  
Fee: $12.00 French Dictionary  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit

The second year language student will continue to build upon skills acquired in French 1. Emphasis on listening comprehension and speaking will continue as students further expand their cultural knowledge of France to include geographical features within France as well as an awareness of other French speaking countries in Europe. Activities that replicate real encounters in a French speaking environment will be provided as students develop the ability to describe people and things, talk about daily routines, leisure activities, vacations and health concerns. Classroom instruction is in French.

**FL2101 & FL2102 SPANISH 2**  
Prerequisite: Spanish 1 or consent of instructor. Students having completed Spanish 1 at the middle school are placed into Spanish 2 upon teacher recommendation.  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit

The second year course will begin with a general review of Spanish 1. The student will be introduced to a more in-depth study of the preterit and imperfect, which will be used to talk about and describe the past. Emphasis on speaking, listening, reading and writing will continue as students will read short stories, write compositions and do short presentations. Students will develop the ability to discuss daily routines, leisure activities and vacations in the present, past and future. Cultural awareness will be presented through readings and videos/movies. Instruction is in Spanish and students will be required to use the target language in class.

**FL3001 & FL3002 FRENCH 3**  
Prerequisite: French 2  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved  
Accepted as U.W. Madison Core Credit

In the third year, students will build upon knowledge gained in levels I and II. The ability to communicate will be expanded through the study of the subjunctive tense. Instruction is in French and students are expected to use the language in class. Classroom activities continue to be conversational; placing students in situations that they might actually encounter in a French speaking environment. Students will explore the French speaking world through various class projects and presentation designed to enhance the student’s cultural awareness of the world around us. This course is required for students planning to travel to France on the school trip.
FL3101 & FL3102 SPANISH 3
Prerequisite: Spanish 2
1 Credit: 2 Semesters
Fee: $12.00 Spanish Dictionary
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

Spanish 3 will begin with a general review of Spanish 2. The course will go more in-depth into grammar topics started in Spanish 2 and include an introduction to the subjunctive, present perfect, and future tense. South America will be the cultural focus with more in-depth studies of Argentina, Ecuador, Perú, and Colombia. Projects, exams, and presentations will encompass not only the grammar and vocabulary but the cultural topics studied as well. Students will read short authentic works and write compositions to reinforce the grammar learned in classes. A conversational approach will be used to practice the grammar being taught. Instruction is in Spanish and students are required to use the target language in class. This class is required for students planning to travel to Spain on the school trip.

FL4001 & FL4002 FRENCH 4
Prerequisite: French 3
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

French 4 is an advanced course designed to prepare students for advanced study of the language. An intensive review of levels 1, 2, & 3 will be supplemented with additional advanced curriculum. Communicative skills continue to be stressed with an emphasis on developing skills in writing. These skills will be further expanded through an introduction to French literature. Instruction is in French and students are required to use French exclusively in class.

FL4101 & FL4102 SPANISH 4
Prerequisite: Spanish 3
1 Credit: 2 Semesters
NCAA Clearinghouse Approved
Accepted as U.W. Madison Core Credit

The fourth year course will review and expand on the first three years. Special attention will be given to the more difficult concepts. Emphasis on oral and written communication will continue, as students will express opinions about current events in the Spanish speaking world and the United States. Students will read a variety of literary works and will be required to do short projects/presentations. Students will be exposed to culture through research via the Internet. Instruction is in Spanish and students will be required to use the target language in class.
FL5001 & FL5002 FRENCH 5  
Prerequisite: Junior or Senior Standing & Successful Completion of French 4  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved

The level 5 course in French seeks to enhance, refine and reinforce skills acquired in the previous levels of French. Student’s skills in French will be further developed through the exposure to and study of authentic materials written and/or recorded in French to include but not limited to Music, Film, and Literature. Contemporary issues and/or historical events will provide the basis for the units of study.

FL6001 & FL6002 SPANISH 5  
Prerequisite: Junior or Senior Standing & Successful Completion of Spanish 4  
1 Credit: 2 Semesters  
NCAA Clearinghouse Approved

Spanish 5 will be an extension of the skills highlighted in Spanish 4. Students will engage in post high school level activities including reading an authentic novel, viewing a film and assessing literary works. Students will engage in an in depth study of the language and culture. Advanced grammar topics will be studied via literature and students will be expected to fine tune their capabilities.
**General Information**

Youth Apprenticeship programs offer junior and senior students a unique opportunity to combine high school course work, occupation-related instruction with other Dane County students, and work-based learning. Students will earn an hourly wage while being mentored by skilled professionals to learn competencies identified by representatives from the program career area. Upon successful completion, students will be awarded a Certificate of Occupational Proficiency by the Department of Workforce Development, and receive Advanced Standing credits at a technical college in the State of Wisconsin. (The number of credits varies per program and is noted in descriptions below).

Students who register go through an application process to be accepted into the program. Acceptance criteria will include: attendance, GPA, teacher recommendations and high school credits at grade level. Students must also be concurrently registered in a related course each semester.

In general, students are released from high school classes for 2 of the 4 blocks. However, some students may schedule additional high school classes, particularly if the related instruction for their program is offered one evening per week, such as the Biotechnology and Financial Services. Students earn 1 high school credit per year in the related instruction and 2 high school credits per year in the work-based learning, for a total of 6 program credits. Transportation to the class and worksite is the responsibility of the family. For more information contact Cindy Brady @ 838-4500 ext. 4709, Janice Gerlach @ 838-4540, or Jackie Guenther @ 838-4531.
YABI11, YABI12, YABI21, YABI22 BIOTECHNOLOGY
Prerequisite: Junior standing, program application and approval, Biology, Biotechnology before or during the program or consent of the instructor.
6 credits: 4 Semesters

Students will earn an hourly wage while learning from skilled professionals. Basic biology is a prerequisite and a biotechnology course is required with the first year program. Upon successful completion of the program, students will be awarded a Certificate of Occupational Proficiency by the department of Workforce Development and up to eleven Advanced Standing credits at a technical college in the State of Wisconsin. Students are required to provide their transportation to class and the worksite during the school day. The overall goal for those who complete the Wisconsin Youth Apprenticeship Program in Biotechnology is demonstrated competence equivalent to the requirements of entry-level positions in a range of laboratory settings. As such, the content of this course provides a foundation for understanding biotechnology as it relates to the development of new technologies and related products, preparing students for the workforce, as well as for more advanced educational and training experiences. Experimentally based, the curriculum is designed to be presented in a manner which encourages both scientific inquiry and technical competence. Basic knowledge, skills, and techniques essential to proficient laboratory work are emphasized throughout the four semester sequence and are intended to complement the training students receive at the worksite.

YAFI11, YAFI12, YAFI21, YAFI22 FINANCE
Prerequisite: Junior standing, program application & approval.
6 credits: 4 Semesters

This program is designed to give students background in the study of money, the functions of the Federal Reserve System, the relationship between the economy and depository institutions, and basic functions of depository institutions and their applications to the day-to-day transactions, which are processed by these institutions. Students develop competencies in Teller Related Functions, New Accounts and Customer Service, Accounts and Customer Support, and Customer Lending Related Functions. Students will learn the principles, marketing, operations, and business law for depository institutions. Up to 9 Advanced Standing college credits are earned.

YAPR11, YAPR12, YAPR21, YAPR22 PRINTING AND GRAPHIC ARTS
Prerequisite: Junior standing, program application & approval
6 credits: 4 Semesters

Students are introduced to a range of career opportunities by rotating through various departments in the printing industry such as Bindery, Composition, Press, Collator, and Office. Instruction stresses safety, and hands-on activities in the following units of study: Introduction to Printing-design principles, proofing, composition & typesetting, Electronic Imaging-computer use to merge graphics and design documents, Image Assembly-line and halftone photography, stripping and plate making, Image Transfer Offset-Press adjustment, mix & test chemistry, maintenance & troubleshooting. Students also cover the economic aspects of estimating jobs, bindery, finishing and calculating paper cutting. Up to 12 Advanced Standing college credits are earned.
**YAHL11, YAHL12, YAHL21, YAHL22 HEALTH SERVICES**  
Prerequisite: Junior standing, program application & approval  
6 credits: 4 Semesters

The core instruction of the first portion of the Health Services Youth Apprenticeship Program provides students with the competencies to meet state certification as a CNA (Certified Nursing Assistant). A CNA MATC-taught course is offered at MHS during summer. This program provides an opportunity to learn health facility operations and fundamentals of client care including facility policies and procedures, safety and universal precautions, equipment use, communications and interpersonal skills. Basic related anatomy, physiology, medical terminology and abbreviations are also included. Direct hands-on care includes CPR, first aid, documentation skills and record keeping. While in the Therapeutic Services unit students may set up clients for treatments by physical or occupational therapists, and in the Diagnostic Services unit students gain experience in lab and x-ray. Students generally are employed in nursing home settings and explore additional career areas through a series of job shadowing experiences. Up to 3 Advanced Standing college credits are earned.

**YAAU11, YAAU12, YAAU21, YAAU22 AUTOMOTIVE TECHNOLOGY**  
Prerequisite: Junior standing, program application & approval  
6 credits: 4 Semesters

This program provides instruction and related job experience in the vehicle service business. Units of study include:  
*Automotive Servicing Orientation/Electrical/Electronic Systems*- Students will develop basic skills in the use of hand and power tools, fastener usage, wire repair and metal work. Electrical and electronic fundamentals are related to service, repair, testing and diagnosis of the automotive battery starting, charging, and lighting system.  
*Suspension and Steering I/Engine Performance I* - Students will demonstrate wheel alignment procedures and related steering and suspension systems service. He/she will service, test, and demonstrate diagnostic procedures for systems related to engine performance and emission control, including basic instrumentation and warning systems.  
*Suspension and Steering II/Brake Systems I* - Students will improve suspension and steering skills and demonstrate the skills required to inspect, service and replace brake system components, including basic hydraulic drum and disc brake systems.  
*Engine Performance II/Break Systems II* - Prepares students to perform diagnosis and repair of electronic engine controls systems related to engine performance and emissions. Students will perform general diagnosis of power assisted brake systems problems. Up to 9 Advanced Standing college credits are earned.

**YATR11, YATR12, YATR21, YATR22 TOURISM**  
Prerequisite: Junior standing, program application & approval  
6 credits: 4 Semesters or 3 Semesters plus summer work

This program is designed to provide students with increased competence in several functional areas: Food & Beverage, Maintenance & Grounds, Marketing & Sales, and Lodging. Informational interviews are a major learning method during the Management Operations & Fiscal Resources unit. Students' work-based learning may range from motel housekeeping and food service to working for a travel agency. A unique feature of this program is the use of summer time between the junior and senior year to gain work-based learning experiences. Up to 9 Advanced Standing college credits are earned.
YAMP11, YAMP12, YAMP21, YAMP22 MANUFACTURING – PLASTICS
Prerequisite: Junior standing, program application & approval
6 credits: 4 Semesters

Manufacturing – Plastics is planned was first offered to Dane County students in the fall of ‘98. Introduction to Manufacturing explores different manufacturing environments, occupations and career opportunities with an emphasis on safe work habits, employability skills, and application of tools and equipment needed in the plastics manufacturing industry. The ability to read, visualize, and interpret industrial blueprints in accordance with industry standards is developed. In the Plastic Manufacturing Material and Process unit students explore, compare and contrast plastic manufacturing processes to other industry processes including testing, recycling, molding, forming, coating, casting, and laminating. Nomenclature, characteristics, advantages, and limitations of each process are emphasized. Plastic Technology expands the knowledge base of theoretical and applied plastic science including technical physics and basic chemistry. Manufacturing Organization & Quality explores functions of administration and support departments in plastics manufacturing organizations including safety regulations, and quality initiatives, with an emphasis on problem solving, teamwork, and total quality management. The work-based learning provides hands-on production type experiences to see the application of the related instruction. Up to 6 Advances Standing college credits are earned.

YAIT11, YAIT12, YAIT21, YAIT22 – INFORMATION TECHNOLOGY
Prerequisite: Junior standing, Program application & approval.
6 credits: 4 Semesters

The newest youth apprenticeship program is Information Technology. Students will have the opportunity to work in this rapidly growing, high demand career field. Coursework prepares students for the option of completing A+ and Network+ industry based certifications. Units of study include: Computer Concepts Competencies—career options, social issues, information processing cycles and systems, office applications, file maintenance procedures and operator systems commands. Hardware/Software Competencies- analyze compatibility, instillation procedures, troubleshoot problems, assemble and test microcomputers. Documentation/Technical Writing - adhere to documentation guidelines and standards from industry and the organization, analyze, interpret, compose, and edit computer system information to develop end-user and technical documentation. Networking - troubleshoot LAN/WAN problems, setup and configure workstations and components, define network topologies. Web - (optional) from using the internet to creating and maintaining internal and external web pages. Programming - understand different computer programming languages and document the program development life cycle methodology.

YACO11, YACO12, YACO21, YACO22 CERTIFIED CONSTRUCTION SKILLS
Prerequisite: Grade of "C" or better in Technology Education (1 credit - 2 terms) Junior year enrollment in Building Trades (Construction) TE3030 (1/2 credit - 1 term)
5 Credits (plus 1 ½ credits above) 4 Semesters

This program offers students an opportunity to explore careers in construction including carpentry, electrical, mechanical, and plumbing trades. Instruction during the junior year will be at the high school and in the senior year with other Dane County students. Core curricula areas are basic safety, basic math, hand tools, power tools, blueprints, and rigging. The first course will integrate hands on activities along with speakers from the trades and student job shadowing. At the completion of the first year students will have the opportunity to work in an identified trade area of interest. Work based learning will begin the spring of the junior year, include summer employment, and extend through graduation with the possibility to continue in the trade area. Upon completion students will receive credit toward high school graduation and may qualify to test-out of the first year of a registered adult apprenticeship program in the specific trade.
YAAG11, YAAG12, YAAG21, YAAG22 PRODUCTION AGRICULTURE

Production Agriculture
Prerequisite: Junior standing, program application & approval.

This one- or two-year program provides the opportunity for work-based learning, occupational instruction and academic education. As a youth apprentice you will earn an hourly wage while learning from skilled professionals. Upon completion you will receive your high school diploma and a Production Agriculture Skill Certificate from the Department of Workforce Development. Course work will include the following:

Year 1 - Animal Science
Topics include animal health, animal environments, anatomy and physiology, genetics and reproduction, animal feedstuffs, and job related safety. Learners will experience animal concepts through the completion of hands-on activities.
- Introduction to Crops and Physiology and Morphology
Topics include pollinating and propagating plants, germinating seeds, plant nutrients, and factors affecting photosynthesis, respiration, and transpiration. Learners will experience soils concepts and plant components and their functions through the completion of hands-on activities

Year 2 - Ag Mechanics, Facilities and Materials Handling
In this course learners will build mechanics skills including safety and emergency response, machinery operation, equipment adjustment, lubrication, tire service, fluid and electrical system service, machinery and equipment cleaning and storage, service records and equipment repair. These competencies will be practiced in the laboratory in simulated activities and performed directly on the farm.

Dairy and Livestock Production
In this course learners will develop the skills necessary for working in a dairy and/or livestock production facility. Areas of study include safety, facility environment, reproduction, feed management, bio-security, animal waste and milling. Competencies will be introduced in the classroom and performed directly on the farm.

After successful completion of the program, participants are eligible to receive up to 6 advanced standing credits at a Wisconsin technical institute and a Certificate of Occupational Proficiency.

YAAU11, YAAU12, YAAU21, YAAU22 ARCHITECTURE

Architecture
Prerequisite: Junior standing, program application and approval.

The architectural career field is broad and challenging. Architectural interns would help architects develops plans and develop architectural and structural features of buildings and structures. Architecture industry mentors are trained to teach youth apprentices the skills and knowledge needed to give them a head start in a related college major and find entry-level employment in the drafting and design/engineering industry. Youth Apprentices rotate through four major areas at the worksite and take related classroom instruction at a local high school, technical college, or the worksite. McFarland High school offers related courses in Architecture Design, Advanced Architecture Design, Building Trades (construction); Drafting I Design, and AutoCAD (Computer-Aided Drafting/Design) Drafting. After successful completion of the program, participants are eligible to receive up to 6 advanced standing credits at a Wisconsin technical institute and a Certificate of Occupational Proficiency.
Yawe11, Yawe12, Yawe21, Yawe22 Welding
Prerequisite: Junior standing, program application and approval
6 credits: 4 Semesters

Youth apprentices are taught the skills and knowledge needed to find entry level employment in the welding industry. Youth apprentices rotate through up to four major areas at the worksite and take related classroom instruction at the local high school, technical college or at the worksite. The Welding Youth Apprenticeship consists of five complete courses. Students will be required to complete four of the courses. After successful completion of the requirements for a high school diploma and the school-based and work-based requirements for Youth Apprenticeship, the students receive a Certificate of Occupational Proficiency from the Department of Workforce Development. Students who complete the two-year Welding Youth Apprenticeship are eligible to receive six or more credits from a Wisconsin Technical College offering related associate degree programs.

Firefighter - By special arrangement. Please see Ms. Brady.
Pharmacy Technician - By special arrangement. Please see Ms. Brady.
Veterinary Technician - By special arrangement. Please see Ms. Brady.
The following legal notices are posted for you to read. They address issues of nondiscrimination and privacy. If you do not understand them, please call the principal's office or the district administrator's office with your questions.

NOTICE OF NONDISCRIMINATION POLICY

The School Board does not discriminate on the basis of race, color, religion, national origin, ancestry, creed, pregnancy, marital status, parental status, sexual orientation, sex, including transgender status, change of sex or gender identity, disability, age (except as authorized by law), military status, or physical, mental, emotional, or learning disability in any of its student programs and activities. Inquiries related to Section 504 of the Rehabilitation Act of 1973, s.118.13, Wisconsin Statutes, or Title IX of the Education Amendments of 1972 should be directed to the District's Non-discrimination Officer at 608-838-4514 or 5101 Farwell Street, McFarland, WI 53558
MCFARLAND COMMUNITY SCHOOLS
DISCRIMINATION COMPLAINT PROCEDURE

If any person believes that McFarland Community Schools or any part of the school organization has inadequately applied the principles and/or regulations of Title VI, Title IX, and Section 504 or in some way discriminates on the basis of sex, race, color, creed, national origin, age, or handicap, he/she may bring forward a complaint to the District Office at the following address:

McFarland Community Schools
5103 Farwell St.
McFarland, WI 53558

INFORMAL PROCEDURE

The person who believes he/she has a valid basis for complaint shall discuss the concern with the Local Title IX or 504 Coordinator, who shall in turn investigate the complaint and reply to the complainant in writing within two (2) days. If this reply is not acceptable to the complainant, he/she may initiate formal procedures according to the steps listed.

FORMAL GRIEVANCE PROCEDURE

STEP 1: A written statement of the grievance shall be prepared by the complainant and signed. This grievance shall be presented to the Local Title IX or 504 Coordinator within five (5) business days of receipt of the written reply to the formal complaint. The Coordinator shall further investigate the matters of the grievance and reply in writing to the complainant within five (5) business days.

STEP 2: If the complainant wishes to appeal the decision of the Local Title IX or 504 Coordinator, he/she may submit a signed statement of appeal to the Superintendent of Schools within five (5) business days after receipt of the Local Coordinator’s response to the grievance. The Superintendent shall meet with all parties involved, formulate a conclusion, and respond in writing to the grievance within ten (10) business days.

STEP 3: If the complainant remains unsatisfied, he/she may appeal through a signed, written statement to the Board of Education within five (5) days of his/her receipt of the Superintendent’s response in STEP 2. In an attempt to resolve the grievance, the Board of Education shall meet with the concerned parties and their representatives within fifteen (15) days of the receipt of the appeal. A copy of the Board’s disposition of the appeal shall be sent by the Board Secretary to each concerned party within ten (10) business days of this meeting.

STEP 4: If, at this point, the grievance has not been satisfactorily settled, further appeal may be made to the Office for Civil Rights, U.S. Department of Education, Washington, D.C. 20201.
DIRECTORY INFORMATION  
McFarland High School Staff Telephone Extensions

If you know the extension for the person/department you are calling, dial 838-4500 and enter their extension.

MHS Administrative Staff
Jeffrey Fintstad - Principal  838-4565
Mr. David Piovanetti - Associate Principal 838-4564
Ms. Anne Nichols - Associate Principal  838-4566

Food Services
Ms. Sherri Kobs - Supervisor - 838-4521

Nelson Bus Service
Mr. Doug Nelson - 205-9040

K-12 School-To-Work Coordinator
Ms. Cindy Brady - 838-4500-Ext. 4709

MHS Office Staff
Ms. Katie Lowery - 838-4500-Ext. 4762
Ms. Julie Tavs - 838-4560
Ms. Alisha Fix - 838-4500-Ext. 4763

K-12 TAG Coordinator
Ms. Kitty VerKuilen - 838-4609

Athletic Department
Mr. Paul Ackley - Athletic Director  838-4568

Guidance Office Staff
Ms. Janice Gerlach - School Counselor - 838-4540
Ms. Jackie Guenther - School Counselor - 838-4531

Mr. Doug Nelson - 205-9040

MHS District Administration
Andrew Bridell - District Administrator - 838-3169
Ms. Roberta Felker - Director of Instruction - 838-4510
Mr. Bill Foust - Director of Building & Grounds 838-4519
Mr. Jeff Mahoney - Director of Business & Technology - 838-4520
Mr. David Witte - Director of Integrated Student Services - 838-4514

Ms. Angela Brunett - School Psychologist - 838-4543
Ms. Beth Miller - Admin. Assistant - 838-4530
Guidance Office Fax - 838-4567

School Nurse
Ms. Alison Potter - School Nurse - 838-4500-Ext. 4761

McFarland Community School Board
Mr. Arlyn Halvorson - President
Mr. Craig Howery - Vice President
Mr. Tom Allen - Clerk
Ms. Ann Molitor - member
Ms. Kelly Cheramy - Treasurer

Attendance Reporting (24 Hours)  
838-4500 - Once your call is answered, press Ext. 1 for "Attendance Information" and then press Ext. 1 again for McFarland High School.

Full staff directory can be found at, [http://www.mcfarland.k12.wi.us/schools/high/MHS-Staff.cfm](http://www.mcfarland.k12.wi.us/schools/high/MHS-Staff.cfm)