

SHEPHERD

High School



2024-2025 Curriculum Guide

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TO PARENTS AND STUDENTS

Shepherd High School courses are designed to help students reach their ultimate professional or vocational goals. The selection of appropriate courses may have a profound effect on career choices. Please read the enclosed course requirements and descriptions carefully before selecting courses.

GRADUATION REQUIREMENTS:

TOTAL CREDITS **27.5 which must include the following:**

English.....4 credits

English 9, 10, 11, 12

Social Studies.....3 credits

World Studies, US History, Civics & Economics

Mathematics.....4 credits

Algebra 1, Geometry, Algebra 2, math experience... Totaling at least 4 credits

Science.....3 credits

Physical Science, Biology, Chemistry or Physics

Physical Education.....½ credit or Team Sports or Marching Band

Health Education.....½ credit

Financial Planning.....½ credit (beginning with class of 2028)

Fine/Applied Arts.....1 credit

Foreign Language (Same Language)...2 Credits or 1 credit with extra credit in VPAA or CTE completion

& Talent Portfolio

TALENT PORTFOLIO

Students will be supported through the process of completing their talent portfolio during Prime Time. Prime Time is scheduled twice a month during the second and fourth Tuesday of each month. Every student has a Prime Teacher and is required to attend.

Talent Portfolio Requirements:

- Resume
- Cover Letter
- Letter of Recommendation
- Educational Development

Plan Completion of the following

- Mock Interview
- 5 hours of Community Service
- Job Shadow or College Visit (form available in counseling office)
- Participation in the Career Fair

PERSONAL CURRICULUM (PC's)

Students who have need of adjustments to the Michigan Merit Curriculum may inquire about a personal curriculum with an administrator or counselor.

GRADUATION HONORS

Summa Cum Laude - (3.9 and above GPA's) will receive a gold cord to wear during the ceremony, and be noted in a special part of the graduation program.

Magna Cum Laude - (3.7 up to 3.9 GPA's) will receive a gold cord to wear during the ceremony, and be noted in a special part of the graduation program.

Cum Laude - (3.5 up to 3.7 GPA's) will be noted in a special part of the graduation program.

Honor Roll - (3.0 up to 3.5 GPA's) will be noted in a special part of the graduation program.

STEM ENDORSED DIPLOMA

Students who successfully complete all of the following credit requirements in grades may earn a notation on their transcript or diploma to indicate that they have earned a STEM endorsement:

1. 6 credit of mathematics
 - a. 4.5 credits from (Algebra 1, Geometry, Algebra 2, DE Pre-Calculus) &
 - b. 1.5 credit from (DE Stats, DE Calc, Financial Planning, Pers. Finance, Accounting, or CTE math course)
2. 6 credits of science
 - a. 3 credits from (Physical Science, Biology, Chemistry) &
 - b. 3 credits from (DE BIO, DE CHM, Environmental Science, Forensic Science, Zoology, CTE science course)
3. ½ credit of technology activities
 - a. Intro to Computer Science or
 - b. Other approved technology course.... Consult with a counselor
4. ½ credit of engineering activities
 - a. Physics or
 - b. CTE Pre-Engineering or
 - c. Robotics

Michigan Transfer Agreement Requirements

Students must successfully complete at least **30 credits***, with at least a **grade of 2.0 in each course**. These credits, which will be certified by a sending institution, should be met according to the following distributions:

English Composition (1) course –

ENG 111

English Composition-or-Communications (1) course –

ENG 222 COM 101, 257

Natural Sciences (2) courses from two disciplines, one with *laboratory experience*....

BIO 100, 101, 103, 131, 135, 141, 142, 201, 203, 210, 245

CHM 105, 106, 111, 112, 241, 242

PHY 105, 211 PSC 101, 102

GEL 101, 112

SCI 200

Mathematics (1) course-

MAT 107, 114, 118, 124, 126, 212, 217, 218, 225, 226, 230

Social Science (2) courses from different disciplines. . .

ANT 170

ECO 110, 201, 202

HIS 211, 212, 223, 251, 252

POL 201, 250

PSY 101, 103, 205, 212, 240, 285

SOC 101, 200, 202, 220, 250, 289

SSC 111, 200

Humanities and Fine Arts (2) courses from different disciplines

ENG 112, 201, 202, 205, 206, 213

FRN 101, 102 GER 101, 102

HIS 101, 102

HUM 101, 102, 183, 200, 205, 210, 225, 251, 252

MUS 275 PHL 201, 205, 210, 220, 250

REL 111, 200, 225, 250

SPN 101, 102

TAI 275

Many Michigan four-year colleges and universities are part of the Michigan Transfer Agreement. The Agreement requires completion of 30 credit hours of course work in general education areas. If a student has successfully completed the appropriate coursework, that student's transcript will be marked "MTA Satisfied". Participating four year colleges and universities will accept that as completion of 30 credits towards their general education requirements. (NOTE: Not all four year colleges and universities participate in MTA. Students intending to transfer should contact their intended transfer institution.) The MTA requires that colleges list coursework which is applicable. The following are MMC's Designated MTA courses (by MTA area): Designated MTA courses -- each course must be completed with a minimum grade of C

TOP TEN HONORS

The scholastic honors of the Top Ten are determined by a formula combining the cumulative grade point average for all courses in grades 9-12 through the second trimester of senior year and a student's highest Composite SAT score. The formula is as follows: $(GPA \times 250) + (SAT \times .625) = \text{Numerical Academic Score}$. The highest possible Numerical Academic Score is 2000. A student's SAT score must be submitted to the school district prior to the last day of the second trimester of senior year. Top Ten students must have been enrolled as Shepherd High School students from the beginning of their junior year through graduation (trimesters 7-12). Students will have through the end of their 12th trimester to complete the Michigan Merit Curriculum.

NATIONAL HONOR SOCIETY

To be eligible for membership in the Shepherd chapter of the National Honor Society, a student must have a cumulative grade point average of 3.50 on a four-point scale. Two documented community service projects are also required for application for admission to National Honor Society.

COURSES/SUMMER SCHOOL/ADULT EDUCATION

Students who are attending high school but find that they do not have necessary credits to be considered on track for graduation may earn credit outside of Shepherd High School. These credits may be granted through approved credit recovery programs. Please see a counselor for details. It must be understood that any deviation from the day-school setting must be with the permission of the counselor and the principal to prevent students from taking courses that will not count toward graduation. Students are responsible for fees associated with such classes where it applies. More information is available in the counseling office.

DUAL ENROLLMENT.....<https://onwardshepherd.weebly.com/dual-enrollment.html>

This is a program designed to permit students to extend, enrich, and broaden their educational experiences by concurrently enrolling in college and high school classes. Courses may be taken at a variety of approved institutions.

This program is intended for eligible students who have met entrance requirements of the college or university as well as state requirements. Interested students should make appointments with the high school counselor and principal to see if they meet the requirements for dual enrollment.

Shepherd High School is responsible for paying the tuition and registration fees for students who meet these requirements in an **amount not to exceed the equivalent to the proration of the student's FTE or the cost of the course, whichever is less.**

NOTE: Failure to successfully earn credit in a Dual Enrollment course will require reimbursement of 100% of cost for course. No further Dual Enrollment course will be scheduled until payment in full.

ARTICULATION

Some higher education institutions have granted an articulation agreement. Articulation is a method of granting university credit for learning and skills accomplished as part of secondary level accomplishment. Please contact the counseling office for details.

SCHEDULE CHANGES

A student may not drop classes without the permission of a counselor and/or parent/guardian. All schedule changes must be done prior to the start of the term. Exceptions: Some changes after the start of a term will be made only for one of the following reasons:

- inappropriate academic placement
- CTE program adjustment
- Approval for dual enrollment
- improper grade level placement
- Approval of independent study
- Staff recommendation

MICHIGAN STUDENT TEST of EDUCATION PROGRESS

All high school students will take the state required High School Tests in Mathematics, Science, English, Language Arts and Social Studies in the spring (MARCH) of their junior year. The M-STEP will include the SAT, the ACT WorkKeys, and several Michigan developed tests. Student transcripts will include SAT scores.

TESTING OUT OF COURSES

Recent changes in the school code have allowed for new opportunities useful in the planning of course selection for students. These changes are as follows:

Students may "test out" of a class by demonstrating mastery of the course material. It is to be considered a demonstration of mastery by earning no lower than a C+ on the final assessment for the course. The final assessment for the course may include projects, presentations, papers, etc. in order to demonstrate mastery for certain courses. The credit earned will be based on a pass/fail and will not be used in computing a grade point average. Students must obtain approval from the high school principal and have tested at least two weeks prior to the trimester in which the course must be taken. Once credit is earned in this manner a student may not receive credit in a lower level course from the same curricular department. Scheduled material pick-up and testing dates are set at the beginning of each school year. Please see a counselor for details.

RETAKING COURSE

A student who fails a required class must retake that class and earn a passing grade in order to meet graduation requirements. If the student retakes a course and earns a passing grade, the former grade will be changed to a NC and will not be reflected in the cumulative GPA. **Students may not repeat a course in which he/she has earned a C+ or better.**

HOMEWORK

It is recommended that each student have regular hours for homework and develop a plan of home study. Such a plan will not only assure better results in school work, but will lead to regular, well-formed study habits. A student needs to spend as much time on homework as necessary to achieve satisfactory results in his/her schoolwork. One of the greatest contributing factors to failure in high school is insufficient time spent on homework.

ACADEMIC DIFFICULTIES

When a student finds a course particularly challenging and needs extra help, there is a process to follow. The student should first approach his/her teacher and ask for additional explanation or after school help. If this is not satisfactory, the student should then make an appointment in the guidance office with his/her counselor. Various strategies will be discussed.

GRADE POINT AVERAGE (GPA)

Student grade point averages are calculated by dividing the sum of the numeric value of the letter grades on a 4-point scale divided by the number of courses taken. Classes for which there is no letter grade issued are not included in either the numerator or denominator of the equation.

GRADE SCALE

Teachers will utilize the following percentages in order to compute student grades:

93% - 100% A	77% - 79%	C+
90% - 92% A-	70% - 72%	C-
87% - 89% B+	67% - 69%	D+
83% - 86% B	63% - 66%	D
80% - 82% B-	60% - 62%	D
73% - 76% C	0% - 59%	E

Academic Requirements for College Athletes

More information with link at onwardshepherd.weebly.com

What is the NCAA Eligibility Center?

The NCAA Eligibility Center certifies whether prospective college athletes are eligible to play sports at NCAA Division I or II institutions. It does this by reviewing the student-athlete's academic record, SAT® or ACT scores, and amateur status to ensure conformity with NCAA rules.

What are NCAA Divisions I, II, and III?

The NCAA is the governing body of many intercollegiate sports. Each college regulated by the NCAA has established rules on eligibility, recruiting and financial aid and falls into one of the three membership divisions (Divisions I, II and III). Divisions are based on college size and the scope of their athletic programs and scholarships.

When should students register?

The NCAA recommends that student-athletes register at the **beginning of their junior year** in high school, but many students register after their junior year. There is no registration deadline, but students must be cleared by the Eligibility Center before they receive athletic scholarships or compete at a Division I or II institution.

How do students register?

Students must register online at the NCAA Eligibility Center. They will have to enter personal information, answer questions about their course work and sports participation outside of high school and pay a registration fee.

To qualify as an academic redshirt, you must graduate high school and meet **ALL** the following academic requirements:

Complete 16 core courses:

- o Four years of English
 - o Three years of math (Algebra 1 or higher)
 - o Two years of natural/physical science (including one year of lab science if your high school offers it)
 - o One additional year of English, math or natural/physical science
 - o Two years of social science
 - o Four additional years of English, math, natural/physical science, social science, foreign language, comparative religion or philosophy
- Earn at least a 2.0 GPA in your core courses.

* Earn an SAT combined score or ACT sum score matching your core-course GPA on the Division I sliding scale.

SHEPHERD HIGH SCHOOL REQUIRED COURSES

ENGLISH 4 CR	WORLD LANGUAGE 2 CR	4th MATH CREDIT/SEN
English 9A	Spanish 1 Credit/Exper. 1 CR	(Choose 1)
English 9B	Spanish 2A	MAT 107 DE = ½ Cr
English 10A	Spanish 2B	MAT 212 DE = ½ Cr
English 10B	VPAA (Choose 1 CR)	MAT 124 DE = 1 Cr
English 11A	Band	MAT 126 DE = 1 Cr
English 11B	Jazz Band - Zero Hour Course	MAT 225 DE = 1 Cr
English 12A or DE ENG 111	Concert Choir	Financial Planning
English 12B or DE ENG 112	Blue & Gold Singers (audition)	Personal Finance
MATH 4 CR		
Algebra 1 A	Wood Fabrication	CTE - Accounting
Algebra 1B/C	Metal Fabrication	CTE - Auto Tech
Algebra 1B/C	Advanced Woods/Fabrication	CTE - Agri-Science
Geometry A	CADD	CTE - Business Management
Geometry B	Cabinetmaking	CTE - Construction Trades
Algebra 2A	Modern Storytelling	CTE - Health Careers CENA
Algebra 2B/C	Art	CTE - Interior Design
IEP - Pre-Algebra	Drawing and Painting	CTE - Machine Trades
4th credit/final year	Ceramics and Sculpture	CTE - Marketing
SCIENCE 3 CR		
Physical Science A	Photography	CTE - Technical Drafting
Physical Science B	Yearbook	CTE - Small Engines Tech
Physical Science B	CTE - Agri-Science	CTE - Welding
Biology A	CTE - Business Management	
Biology B	CTE - Cosmetology	All CTE courses are 3 Cr for full yr.
Chemistry A	CTE - Culinary Arts and Food Services	
Chemistry B	CTE - Digital Media	
Social Studies 3 CR		
World Studies A	CTE - Educational Careerss	
World Studies A	CTE - Graphics nd Design	
World Studies B	CTE - Interior Design	
US History A	CTE - Machine Trades	
US History B	CTE - Marketing	
Civics & Economics	CTE - Technical Drafting	
Health & PE 1 CR		
Health & (PE or Marching Band)	CTE – Welding	
	CTE – Criminal Justice	

SHEPHERD HIGH SCHOOL ELECTIVE COURSES

ENGLISH	Tris	Grade	BUSINESS	Tris	Grade	CTE (Grades 11 and 12)
Young Adult Literature	1	9-12	Career Exploration	1	9-12	Accounting
Student Leadership	1-3	9-12	Marketing & Management	1	9-12	Automotive Tech
Modern Storytelling	1	9-12	Personal Finance	1	9-12	Business Management
Yearbook	1-3	9-12	Financial Planning	1	9-12	Construction Trades
DE COM 101 SPEECH	1	11-12	Intro Computer Science	1	9-12	Cosmetology
SCIENCE			INDUSTRIAL			Culinary Arts and Food Services
Environmental Science (even yrs)	1	10-12	Wood Fabrication	1	9-12	Digital Media/Web Design
Forensic Science (odd yrs)	1	10-12	Metal Fabrication	1	9-12	Education Careers
Zoology	1	10-12	Advanced Woods/Fabrication	1	10-12	Health Careers/ CENA
Anatomy A	1	10-12	CADD	1	9-12	Interior Design
Anatomy B	1	10-12	CabinetMaking	1	9-12	Machine Trades
DE PHY 105	1	12	SPECIAL AREAS			Marketing
DE CHM 105	2	12	College and Career Readiness	1	11-12	Printing/Graphic Communication
SOCIAL STUDIES			Independent Study	1	11-12	Small Engine Tech
History vs Hollywood	1	11-12	Work Study	1	11-12	Technical Drafting
Practical Law	1	10-12	Guided Academics	1	9-12	Welding
Mod. Am. & Current Events (even)	1	9-12	PHYSICAL EDUCATION			Agriscience - Alma
DE HIS 101	1	10-12	Weight Training T1	1R	9-12	Pre-Engineering - Alma
DE PSY 101	1	10-12	Weight Training T2	1R	9-12	Criminal Justice - Alma
DE SOC 101	2	10-12	Weight Training T3	1R	9-12	CyberSecurity
			Global Sports Fall	1R	9-12	
MATH			Global Sports Winter	1R	9-12	Common Dual Enrollment
<i>MAT 107 DE COLLEG ALGEBRA</i>	1	11-12	Global Sports Spring	1R	9-12	SPN 102 (Spanish 2) - 4CR
<i>MAT 212 DE STATS</i>	1	11-12	Athletic Leadership	1	9-12	PSY 101 (Psychology) - 3CR
<i>MAT 124 DE PRE-CALC</i>	2	11-12	Intro to Officiating	1	9-12	SOC 101 (Sociology) - 3CR
<i>MAT 126 DE CALC 1</i>	2	11-12	Nutrition	1	9-12	HIS 101 (History) - 3CR
<i>MAT 225 DE CALC 2</i>	2	11-12				BIO 103 (Biology) - 4CR
ART			R = Allowed to REPEAT			CHM 105 (Chemistry) - 4CR
Art	1	9-12				ENG 111 (English 12A) - 3CR
Drawing and Painting	1	9-12				ENG 112 (English 12B) - 3CR
Ceramics and Sculpture	1	9-12				MAT 107 (College Algebra) - 3CR
Photography	1	9-12				MAT 212 (Stats) - 3CR
MUSIC						MAT 124 (Precalc) - 5CR
Band	3	9-12				MAT 126 (Calc 1) - 5CR
Jazz Band - Zero Hour Course	3	9-12				<i>COM 101 - (Speech)</i>
Concert Choir	3	9-12				<i>PHY 105 (Physics) - 5CR</i>
Blue & Gold Singers (audition)	3	9-12				
						Note: All DE classes greater than 3 College Cr will earn 1 full HS Cr

SHEPHERD HIGH SCHOOL

Career Technical Education & Dual Enrollment

ELECTIVE COURSES

CTE (Grades 11 and 12)

Accounting Automotive Tech
Business Management
Construction Trades
Cosmetology
Culinary Arts and Food Services
CyberSecurity
Digital Media/Web Design
Education Careers
Health Careers/ CENA Interior
Design
Machine Trades
Marketing
Printing/Graphic Communication
Small Engine Tech
Technical Drafting
Welding
Agriscience - Alma
Pre-Engineering - Alma
Criminal Justice -Alma

Common Dual Enrollment

SPN 102 (Spanish 2) - 4CR
PSY 101 (Psychology) - 3CR
SOC 101 (Sociology) - 3CR
HIS 101 (History) - 3CR
BIO 103 (Biology) – 4 CR
BIO 101 (Biology) - 4CR
CHM 105 (Chemistry) - 4CR
ENG 111 (English 12A) - 3CR
ENG 112 (English 12B) - 3 CR
COM 101 (Speech) - 3CR
MAT 107 (Col Algebra) - 3CR
MAT 212 (Stats) - 3CR
MAT 124 (Precalc) - 5CR
MAT 126 (Calc 1) - 5CR
PHY 105 (Physics) - 5CR

**Note: All DE classes greater than
3 College Cr will earn 1 full HS Cr
and can include a LAB period**

CAREER PATHWAYS

Shepherd High School has utilized a **Career Pathway** program to help students plan for their future and develop a focus for their academic experience. The key elements in this program are the **Career Pathways**.

What is a Career Pathway?

In general, a path is a route taken to a destination. Sometimes it is well defined and direct, while other times it can wander and change direction. In either case, time spent planning the route will lessen the chance of getting lost or taking a wrong turn. Paths in the *Career Pathways* program are simply a way of grouping careers by similar characteristics and common employment requirements. This allows the student to follow a defined path of sequenced courses, which will help provide focus and direction to their learning experience.

Why use Career Pathways?

Career paths help students by providing a framework to assist in planning, setting goals, and showing how what they learn in school relates to where they want to go when they graduate. The good jobs of the future will go to the people who have the right combination of skills and academic experience. In order to compete for those jobs, students can make better decisions about their future by having a "map" of the possible paths that they can take to get there.

How does it work?

Beginning in 8th grade, each student chooses a career path to use in selecting courses and setting goals for their future. The choice can be changed at any time, and the high school's guidance and counseling staff can assist students in making decisions. Other career preparation programs in the district will also assist in guiding and preparing students in this area.

Arts and Communications: careers related to the humanities and the performing, visual, literary, and media arts.

Business, Management, Marketing, and Technology: careers related to all aspects of business including accounting, business administration, finance, information processing and marketing.

Engineering/Manufacturing and Industrial Technology: careers related to technologies necessary to design, develop, install, or maintain physical systems.

Health Sciences: careers related to the promotion of health as well as the treatment of injuries, conditions, and disease.

Human Services: includes careers in childcare, civil service, education, hospitality, and the social services.

Natural Resources and Agriscience: careers related to natural resources, agriculture, and the environment.



ARTS & COMMUNICATIONS

Careers in arts and communications relate to the humanities and to the performing, visual, literary, and media arts. These include architecture; graphic, interior, and fashion design; writing; film; fine arts; journalism; and advertising.

Is this Career Path for you?

Are you a creative thinker? Are you imaginative, innovative, and original? Do you like to communicate ideas? Do you like making crafts, drawing, playing a musical instrument, taking photos, or writing stories? This may be the career path for you.

Career Categories

Advertising and Public Relations, Creative Writing, Film Production, Foreign Languages, Journalism, Radio and TV Broadcasting

Courses in School

Speech and Debate, Web Page Design, Language Arts, Fine and Performing Arts, Architectural Drafting and Design, Sculpture

Sample Careers and Levels of Education Required

Public Relations Executive (Undergraduate Degree), Dancer (High School Diploma), Film Producer (1 to 2 Years Past High School), Fashion Designer (Undergraduate Degree), Journalist (Undergraduate Degree), Radio and TV Broadcaster (1 to 2 Years Past High School)



MARKETING, & TECHNOLOGY

BUSINESS,

MANAGEMENT,

Careers in this path are related to the business environment. These include sales, marketing, computer/information systems, finance, accounting, management, and economics.

Is this Career Path for you?

Do you enjoy being a leader, organizing people, planning activities, and talking? Do you like to work with numbers or ideas? Do you enjoy carrying through with an idea and seeing the end product? Do you like things neat and orderly? Would you enjoy balancing a checkbook, following the stock market, holding an office in a club, or surfing the internet? This may be your career path!

Career Categories

Accounting, Office Administration, Business Ownership, Economics, Hospitality/Tourism Management, Computer/Information Systems, Marketing, Sales, Finance

Courses in School

Mathematics, Language Arts, Computer Science, Business Management, Computer Support, Accounting, Marketing

Sample Careers and Levels of Education Required

Loan Officer (Undergraduate Degree), Sales Person (High School Diploma), Legal Secretary (1 to 2 Years Past High School), Hotel Manager (1 to 2 Years Past High School), Office Manager (1 to 2 Years Past High School), Computer Programmer (1 to 2 Years Past High School), Travel Agent (1 to 2 Years Past High School), Economist (Undergraduate Degree).



ENGINEERING & INDUSTRIAL TECHNOLOGY

ENGINEERING/MANUFACTURING

Careers in this path are related to technologies necessary to design, develop, install, or maintain physical

Is this Career Path for you?

Are you mechanically inclined and practical? Do you like reading diagrams and blueprints, and drawing building structures? Are you curious about how things work? Would you enjoy painting a house, repairing cars, wiring electrical circuits, or woodworking? This may be the career path for you!

Career Categories

Architecture, Precision Production, Mechanics and Repair, Manufacturing Technology, Engineering and Related Technologies, Drafting, Construction

Courses in School

Mathematics, Electronics, Drafting, Science, Industrial arts, Machine Tools, Physical Sciences/Physics,

Sample Careers and Levels of Education Required

Architect (Graduate Degree), Plumber (1 to 2 Years Past High School), Electrician (1 to 2 Years Past High School), Air Traffic Controller (1 to 2 Years Past High School), Auto Mechanic (1 to 2 Years Past High School), Draftsman (1 to 2 Years Past High School), Surveyor (1 to 2 Years Past High School), Geographer (Undergraduate Degree), Chemical Engineer (Undergraduate Degree)



HEALTH SCIENCES

Careers in this path are related to the promotion of health and treatment of disease. These include research, prevention, treatment, and related health technologies.

Is this Career Path for you?

Do you like to care for people or animals that are sick or help them stay well? Are you interested in diseases and in how the body works? Do you enjoy reading about science and medicine? Would it be fun to learn first aid or volunteer at a hospital or veterinary clinic? This may be your career path!

Career Categories

Dentistry, Medicine, Nursing, Nutrition and Fitness, Therapy and Rehabilitation

Courses in School

Mathematics, Physics, Language Arts, Biological Sciences, Chemistry, Health and Physical Education, Animal Care

Sample Careers and Levels of Education Required

Dentist (Graduate Degree), Dental Hygienist (1 to 2 Years Past High School), Veterinary Technician (1 to 2 Years Past High School), Respiratory Therapist (1 to 2 Years Past High School), Doctor (Graduate Degree), Physical Therapist (Undergraduate Degree)



HUMAN SERVICES

Careers in this path are related to economic, political, and social systems. These include education, government, law and law enforcement, military, religion, childcare and social services.

Is this Career Path for you?

Are you friendly, open, understanding, and cooperative? Do you like to work with people to solve problems? Is it important to you to do something that makes things better for other people? Do you like to help friends with family problems? Do you like reading, storytelling, traveling, or tutoring young children? This could be your career path!

Career Categories

Education, Child and Family Services, Food and Beverage Service, Law and Legal Studies, Law Enforcement, Cosmetologist, Social Services

Courses in School

History, Political Science, Social Studies, Language Arts, Cosmetology, Psychology, Culinary Arts, Child Care

Sample Careers and Levels of Education Required

Chef (1 to 2 Years Past High School), Firefighter (1 to 2 Years Past High School), Police Detective (1 to 2 Years Past High School), Cosmetologist (1 to 2 Years Past High School), Teacher (Undergraduate Degree), Lawyer (Graduate Degree), Librarian (Graduate Degree), Social Worker (Undergraduate Degree)



AGRISCIENCE

NATURAL RESOURCES &

Careers in this path are related to agriculture, the environment, and natural resources. These include agricultural sciences, earth sciences, environmental sciences, fisheries, forestry and wildlife.

Is this Career Path for you?

Are you a nature lover? Are you practical, curious about the physical world, and interested in plants and animals? Do you enjoy hunting or fishing? Do you like to garden or mow the lawn? Are you interested in protecting the environment? This could be your career path!

Career Categories

Agriculture, Animal Health Care, Earth Sciences, Environmental Science, Fisheries Management, Wildlife Management, Horticulture, Forestry, Life Sciences

Courses in School

Agriculture, Astronomy, Chemistry, Biological Sciences, Animal Science, Mathematics, Botany, Geography...

Farmer (1 to 2 Years Past High School), Landscaper (High School Diploma), Oceanographer (Undergraduate Degree), Chemist (Undergraduate Degree), Forester (Undergraduate Degree), Physicist (Graduate Degree), Marine Biologist (Graduate Degree), Conservation Agent (Undergraduate Degree)

ENGLISH DEPARTMENT

To meet the needs of Shepherd High School students and to keep current with the ever-increasing demands for flexible communication skills, the English department offers several courses to help students meet high school graduation requirements. The courses are organized in a sequential skill and concept approach, which enables students to achieve success and experience with all components of communication and prepares them for the Michigan Merit Exam required by the state. The required courses are established to teach the basic communication skills necessary for success in society. They are designed to make students competent in the reading, writing, speaking, listening, and literature appreciation strands of the English language. As students progress through the curriculum, there is increasing demand for them to organize and critically analyze all forms of information. All required classes incorporate the exit outcomes as established by Shepherd High School. In order to graduate, students must receive four credits in the required classes listed below.

Required Classes

Grade 9: English 9 A&B

Grade 10: English 10 A&B

Grade 11: English 11 A&B

Grade 12: English 12 A&B or Dual Enrollment ENG 111 and 112

English 9 (A & C, BMMT, EMIT, HES, HUS, NRA) Grade 9 2 Trimesters

All ninth-grade students are required to take ninth grade English before taking any other English class. The class includes an introduction to the study of several different genres of literature. The classes will also emphasize English language conventions and grammar standards. Major writing assignments will be essays and a research project.

English 10 (A & C, BMMT, EMIT, HES, HUS, NRA) Grade 10 2 Trimesters

The tenth grade curriculum includes a continuation of the English Language Arts standards by introducing students to a variety of literary genres. The classes will also emphasize English language conventions and grammar standards. Major writing assignments will be essays and a research project.

English 11 (A & C, BMMT, EMIT, HES, HUS, NRA) Grade 11 2 Trimesters

The eleventh grade curriculum includes a continuation of the English Language Arts standards by introducing students to a variety of literary genres. The classes will also emphasize English language conventions and grammar standards. Major writing assignments will be essays and a research project.

English 12 (A & C, BMMT, EMIT, HES, HUS, NRA) Grade 12 2 Trimesters

The twelfth grade curriculum includes a continuation of the English Language Arts standards by introducing students to a variety of literary genres. The classes will also emphasize English language conventions and grammar standards. Major writing assignments will be essays and a research project.

ENGLISH DEPARTMENT ELECTIVES

In order to challenge the diverse interests of the students of Shepherd High School, the Department of English offers several elective or exploratory courses. While the required courses enable students to attain proficiency in general communication skills, the elective courses allow students to expand their awareness and experience in specific components of the language arts area. The elective courses listed below do not satisfy the department requirements for graduation.

Young Adult Literature

Grades 10-12

1 Trimester

This course focuses on the history, genres, themes, and characteristics of young adult literature. The genres covered include contemporary, historical fiction, science fiction, and fantasy. Students will read a minimum of 6 books both individually and in small groups and will complete a variety of projects along with daily discussions and reflections.

Yearbook (Formerly Desktop Publishing)

Grades 9-12

1-3 Trimesters

This course is designed for students who are interested in being involved in the advanced stages of publication productions and journalism, including the editing and supervision of the school yearbook. Students will gain skills in page design, publishing, photography, and production. This class requires additional duties outside of the normal school day.

Student Leadership

Grades 9-12

1-2 Trimesters

This course is an experience-based course focused on developing individual and group leadership skills. Students will participate in team-building activities as well as audit the school for areas of improvement. Based on their assessment of areas needing improvements, students will follow a planning and implementation process in order to make the identified improvements.

Modern Storytelling

Grades 9-12

1 Trimester

This course focuses on storytelling in a variety of mediums. Students will experience how stories are told in modern times: print (novels, poetry, short stories, etc.), film, podcast, music, and more. Students will work independently and collaboratively to complete a variety of projects in order to understand the impact of different modes of modern storytelling.

MATHEMATICS DEPARTMENT

4-credit mathematics requirement minimum of Algebra 2

Algebra I (A & C, BMMT, EMIT, HES, HUS, NRA) Grades 9-12

3 Trimesters

Algebra I is a first course in the formal study of mathematical language and principle. Through algebra I, knowledge and skills necessary for further mathematical study will be developed. Algebra I is a full year course containing the study of the principles upon which the real number system is based. Integrating algebra and geometry concepts, algebra I provide the mathematical content necessary to align with local, state, and national mathematics curriculum guidelines. Algebra is an important study, which is fundamental to all science and technology as well as the prerequisite to formal geometry and other future mathematics course.

Geometry (A & C, BMMT, EMIT, HES, HUS, NRA) Grades 9-12

2 Trimesters

Prerequisite: Algebra I, and course placement by mathematics department

Geometry is an organized study of the relationships between points, lines, angles, planes, and the resulting plane and solid figures. Logical thinking is developed through the proving of statements dealing with the basic elements of geometry. Some algebra is used in solving geometric situations. Practical applications show how deductive reasoning can be used in non-mathematical, as well as, mathematical cases. The course concludes with some work in the coordinate and solid geometry areas. Geometry is essential for students entering careers in all fields of science and mathematics and also for those considering art, social studies, language and music. Students showing high ability in math may take geometry and algebra 2 at the same time. Consent to "Double" form must be approved by the Mathematics Department.

Algebra 2 (A & C, BMMT, HUS)

Grades 10-12

3 Trimesters

Prerequisite: Algebra I, Geometry, and course placement by mathematics department

Algebra 2 begins with a review of number properties, one-variable equations, and two-variable functions and equations. Throughout the course, students will examine the following types of functions analytically and graphically: linear functions, quadratic functions, higher degree polynomial functions, radical functions, exponential and logarithmic functions, rational functions, reciprocal functions, and trigonometric functions. The course will include basic applications of each type of function. Students showing high ability in math may take Geometry and Algebra 2 at the same time. Consent to "Double" form must be approved by the Math Department.

Pre-Algebra

Grade 9 (IEP)

2 Trimesters

Students are placed into this course through an IEP.

This course is designed to provide students with an opportunity to develop and improve their math skills before taking Algebra 1. The course will cover the basics of mathematics; rounding, fractions, and the coordinate plane, as well as factoring, distribution, identifying patterns, and solving one and two step equations. This course is credit bearing and students will receive a letter grade based on their demonstration of the skills presented.

Early College Advisory

Grade 13 (IEP)

3 Trimesters

Students are placed into this course through acceptance into the 5th year Early College Program.

This course is designed to provide students with an opportunity to develop and improve their math and financial skills by creating a budget with a spreadsheet. This spreadsheet will also include logic and mathematical formulas to calculate cells based on other cell values.

SCIENCE DEPARTMENT

Required Course Sequence

2 trimesters of Physical Science 2 trimesters of Biology
2 trimesters of Chemistry

Physical Science A (HES) Grade 9 1 Trimester

This is a 1 trimester course covering essential physical science concepts such as 1-D Kinematics, Newton's Laws, Momentum, Energy, and Thermodynamics. This class is required for all students.

Physical Science B (HES) Grade 9 1 Trimester

This is a 1 trimester course covering essential physical science concepts such as Electricity/Magnetism, Sound, Light, and Earth/Space Science. This class is required for all students.

Biology A (HES) Grade 10 1 Trimester *Prerequisite: Completion of Physical Science*

This course is required for 10th grade or first year high school science students. Two trimesters of biology are required for high school students in science. This course will cover essential biology concepts such as how systems work, cell structure review, introductory chemistry, organic macromolecules and basic genetics.

Biology B (HES) Grade 10 1 Trimester *Prerequisite: Completion of Physical Science*

This course is required for 10th grade or first year high school science students. Two trimesters of biology are required for high school students in science. This course will cover natural selection and evolution, how energy is created and used by living things, and principles of ecology.

Chemistry A (HES) Grade 11 1 Trimester *Prerequisite: Completion of Biology A and B*

This class will study all essential chemistry concepts over the course of 1 trimester.

Chemistry B (HES) Grade 11 1 Trimester *Prerequisite: Successful completion of Chemistry A.*

This class will study all core chemistry concepts over the course of 1 trimester. Concepts learned in chemistry A will be built upon and integrated into new concepts taught during chemistry B. This part of the course includes many projects that will require students to use their new knowledge of chemistry.

SCIENCE DEPARTMENT ELECTIVES

Environmental Science (HES)

This is a 1 trimester class will focus on principles of ecology, how the human population affects our planet and some of the major events that threaten our planet such as global climate change, acid deposition, and pollution of air, water and land in general. There is multiweek ecosystem project that occurs as well.

Zoology (HES) Grades 10-11 1 Trimester *Prerequisite: At least a B in Biology*

This is a 1 trimester class that studies the great diversity of animal life found on this planet. Numerous projects will be assigned throughout the year in this class. Some dissection may take place. These projects will require the student possessing or learning many forms of technology.

Forensic Science (HES) Grades 10-12 1 Trimester

This class is designed to be a 1 trimester course. One trimester will study the biological components of forensic science such as determining blood types, fingerprinting, DNA analysis, and hair analysis. Many lab activities will be incorporated in this class.

At least one year of the following one-trimester courses is strongly recommended to any student planning on taking a biology course in college. These classes are designed for students who received at least a B in a Biology course.

Anatomy A (HES) Grades 10-12 1 Trimester *Prerequisite: 10th grade*

This course focuses on the structure-function relationship of the human body systems. Both identification and application of the parts of the human body's anatomy is required. Systems that will be explored include but are not limited to the Skeletal System, Muscular System, Nervous System, Cardiovascular System, and the body's special senses.

Anatomy B (HES) Grades 10-12 1 Trimester *Prerequisite: Anatomy A*

This course focuses on the human body's ability to maintain homeostasis. Both identification and application of the parts of the human body's anatomy is required (including knowledge obtained from Anatomy A). Systems that will be explored include but are not limited to the Integumentary System, Respiratory System, Digestive System, Immune System, and Endocrine System.

Laboratory Technician (HES) Grades 11-12 1-3 Trimesters

To be eligible for this position the student will have successfully completed chemistry with at least the grade of a B and have the permission of the department chairperson. Only one student will be eligible to fill this position each hour. The student will be required to keep the stock room neat and orderly, put out and put away all lab materials, mix solutions, help students with research projects, do internet searches for information, and use all apparatus in science classrooms. In addition, the student will be required to formulate a question and conduct research over the course of the year concerning their question. By the end of the year they will have typed a copy of their research, presented it orally in a formal setting, and published it on the internet.

DUAL ENROLLMENT SCIENCE ELECTIVES: CHM 105, BIO 103, BIO 101, PHY 105

SOCIAL STUDIES

Required Classes

- 9th World Studies
- 10th United States History
- 11th Economics / Civics

Elective Classes

- Practical Law
- History vs. Hollywood
- Modern America & Current Events

World Studies (A & C, HUS)

Grade 9

2 Trimesters

This survey course of world studies begins with the development of ancient civilizations and ends with 20th and 21st century world issues. Units of study will include: Emergence and Growth of Early Civilizations, Classical Civilizations, The Middle Ages, Development of Europe, and American Issues in 20th and 21st centuries. Emphasis is not only placed on historical themes, but also on geographic trends and patterns.

United States History (A & C, HUS)

Grade 10

2 Trimesters

United States history is the study of 20th century American history. This survey of American history starts with life at the turn of the century and ends with the study of the present day. Major units of study include: Immigration, Progressive Era, Imperialism, and World War I; the 1920s, the Great Depression and the New Deal; World War II; the Cold War; the Civil Rights Movement; the Kennedy and Johnson years; the Vietnam Era; Social Movements of the 1960s and 1970s; the Nixon, Ford, and Carter years; the Reagan and Bush years; and Contemporary American Society. Specific emphasis is placed on the social, economic, political, geographic, and ideological factors that shaped our country.

Civics (A & C, BMMT, HUS)

Grade 11

1 Trimester

This class studies the development of government in America. It includes a systematic examination of government at the local, state, and federal levels. Emphasis is placed on the individual's roles in the governmental process through their citizenship and responsibilities

Economics (A & C, BMMT, HUS)

Grade 11

1 Trimester

Students will study the basic theories, laws, terminology, facts, and history of economics. Emphasis will be placed on integrating basic economic philosophy (scarcity, supply/demand, role of the consumer, role of business, role of government) into the lifestyles of the students. International dynamics of economic issues are also addressed.

SOCIAL STUDIES ELECTIVES

Modern America & Current Events (A & C, HUS) **Grades 11-12** **1 Trimester**
Prerequisite: US History A and US History B

Modern America & Current Events is the study of recent American History. This class focuses on the time period from 1980 to the present and centers on America's role in major world events. Major topics of study include: The Reagan presidency, the end of the Cold War, the First Gulf War, the Clinton Years, the 2000 election, September 11th, and the War on Terror. Students in the class will also study current issues that are facing America. Pre-requisites for this class include U.S. History A & B.

Practical Law (A & C, BMMT, HES, HUS) **Grades 11-12** **1 Trimester**

This class is a study of the court system, criminal law, and civil law. Topics include landmark court decisions, recognition of crimes, the criminal justice system, juvenile justice, types and purposes of punishment, and tort law.

History v. Hollywood **Grades: 9-12 Course Length:** **1 Trimester**

This elective course explores how Hollywood portrays historical topics through film. In this course students will view Hollywood produced movies and analyze how accurate they are. In the course of viewing the movie, students will learn about the context of the time in which the movie is set and compare primary source materials to the version of history that is illustrated in the film. Students will also complete projects to learn about the history that the movie is set in. Emphasis in this course is placed on historical thinking skills that enable students to evaluate evidence, develop comparative and causal analyses, interpret the historical record, construct sound historical arguments, and recognize perspectives on which informed decisions can be based.

This course meets the following Shepherd High School student exit outcomes: critical thinking/ problem solving, communication/ literacy, teamwork, and proficiency in social studies.

FOREIGN LANGUAGE

Spanish 1 (A & C, BMMT, HUS)

Grades 9-12

2 Trimesters

Spanish 1 is geared to enable a student to communicate on an elementary level in Spanish speaking, reading, and writing. Students will receive a general introduction to Hispanic cultures. As much as possible, the class is conducted in Spanish.

Spanish 2 (A & C, BMMT, HUS)

Grades 9-12

2 Trimesters

Prerequisite: Spanish I

Spanish 2 has the same format as Spanish 1, but with more emphasis on conversation and vocabulary development. Along with oral and written work, time will be devoted to the study of Hispanic cultures. All students who complete Spanish 1 are urged to take Spanish 2

DUAL ENROLLMENT OPTIONS:

DE SPN 102

HEALTH AND PHYSICAL EDUCATION

Health: Grade 9 (1 Trimester)

The purpose of this course is to provide the students with factual information and resources to make the best decisions regarding their health. Topics include nutrition and physical activity, alcohol, tobacco and other drugs, safety, social and emotional health, personal health and wellness, HIV prevention, and sexual education.

Weight Training 9-12 (Suggested: 3 trimesters per year)

This course is for students and student/athletes who want to work to improve their physical, social, and mental health while learning about the primary muscle groups and their function. Students will be active every day with classes centered around the five categories of fitness: strength, speed, power, agility, and cardiovascular endurance. Daily workouts will include resistance, plyometric, and cardiovascular training. Students will also work towards creating a personal workout plan designed around their specific goals.

Nutrition: Grades 9-12 (1 Trimester)

Prerequisite: Health 9

Nutrition is open to all students who want to learn more about calories, nutrients, and popular diets. During the course, students will study popular diets (keto, high protein, fasting, etc.) and create nutrition plans to meet their health and fitness goals.

PE Sports: (Fall, Winter, Spring)

PE Sports is open to all students, grades 9-12. In PE Sports, students will be developing their manipulative skills for recreational activities while also improving their five categories of fitness (strength, speed, agility, power, and cardiovascular endurance).

Officiating: 9-12 (1 Trimester)

In this class, students will learn about officiating. There is a great demand for high school officials; it is a great way to stay involved and give back to the community. This class will explore the roles and realities of being an official. There will be an opportunity through the MHSAA to become part of the Legacy Program - and become certified to officiate in up to two different sports. If you want to find a great part-time job that positively impacts high school and middle school athletes, this class will give you that opportunity.

Leadership In Athletics: 9-12 (1 Trimester)

Every community needs coaches and this class will give you the depth and background to start your coaching career. We will explore the basis of coaching: how to build quality relationships with athletes. In addition, students will develop a philosophy of coaching and begin to build a foundation of the coaching process.

LIFE AND CAREER

FAMILY AND CONSUMER SCIENCE DEPARTMENT

Family and consumer science classes offer foundational skills to help students function and prosper as responsible teens and in their independent lives after high school and throughout the life cycle. This curriculum encourages and supports the quality, growth and stability of the family unit. Students can develop an individual sense of wellbeing to become contributing members of society as a family member, worker, nurturer, consumer, citizen and life-long learner.

Life Skills (*BMMT, HES, HUS*)

Grades 9-12

1 Trimester

The focus of this class is to provide information on upcoming adult responsibilities and skills needed in a changing world. Coursework includes units on personal management, self-discovery, making responsible decisions, and violence prevention. These topics are covered first in order to allow students to better understand themselves and their approaches to life before moving on to specific skills.

Students also learn specific life skills of nutrition, food preparation, making wise consumer choices, and employment skills. Also, stress management and communication skills are studied and practiced to establish and maintain relationships at home and in the working world.

Business & Technology Department

Course Name

Length

Career Exploration and Readiness	1 Trimester
Marketing & Management	1 Trimester
Personal Finance	1 Trimester
Financial Planning	1 Trimester
Intro to Computer Science	1 Trimester
Work-Based Learning	1-6 Trimesters

Career Exploration and Readiness (A & C, BMMT) Grades 9-12 1 Trimester

This class will empower students to make choices about their future by exploring the various career pathways, evaluating their strengths and weaknesses, interests, and goals, and to help prepare them to enter the workforce. They will explore education and career options, the job search process, including resume and interview preparation, and how to prepare and plan for the future. Presentations from local employers and professionals from the various career pathways will be used to educate the students on the skills they need to be successful and how they can prepare for entering the workforce. Students will have an opportunity to job shadow in a career field of their choice.

Marketing & Management (A & C, BMMT) Grades 9-12 1 Trimester

Students in this class will earn retail experience working in “The Jay’s Nest”, the school store, which can be added to the student’s resume and aid in obtaining future employment. This will give them hands-on experience in sales, marketing, management, and customer service as they help set up displays, design, order, market, and sell merchandise, keep various records, provide inventory control, and obtain other useful skills related to marketing and management in a retail setting.

In addition to retail exposure, students will also explore marketing and management concepts such as entrepreneurship, advertising, sales promotion, and careers in a variety of areas including sports, entertainment, hospitality, and tourism.

Accounting I (BMMT) Grades 10-12 2 Trimesters

Accounting is the language of business. Accounting I is designed to prepare students for employment and provide students with a foundation for business degrees offered at two and four year colleges. Students will gain experience in service and merchandising business accounting systems. Areas of study include preparing journals, ledgers, payroll and financial reports for service, merchandising, and corporate accounting systems. Students will use online working papers to complete assignments.

Students can earn a senior math credit towards graduation requirements in Accounting. Students may earn free college credits with Davenport University and Ferris State University (See teacher or counselor for details).

Personal Finance (BMMT) Grades 10-12 1 Trimester

This course is designed to develop the ability of the students to make informed decisions and become a good money manager as a consumer, student, and family member. Topics covered include buying/leasing a car, buying/renting a home, landlord/tenant responsibilities, filling out various loan applications, property, liability, health, and life insurance, credit procedures and laws, costs of credit, and problems with credit.

Financial Planning (BMMT) Grades 10-12 1 Trimester

Students will study a variety of subjects related to finance and investment activities. Students will learn about employee pay and benefits, federal and state income taxes, preparing income tax forms, setting financial goals, saving/paying for college and retirement, and investing in stocks, bonds, mutual funds, real estate, and other investment alternatives.

Intro to Computer Science (BMMT) Grades 10-12 1 Trimester This course is designed to offer an introduction to computer science. Students will learn the basics of computer programming using Python along with the basics of computer science. The material emphasizes computational thinking and helps develop the ability to solve complex problems. This course covers the basic building blocks of programming along with other central elements of computer science.

Work-Based Learning (A & C, BMMT, HUS) Grades 11-12 1-6 Trimesters

Prerequisite: Business Technology

Work-based Learning is a program that gives the student an opportunity to further explore their chosen career field and gain experience in a supervised environment. Students will have release time from the regular school day in order to fulfill the obligations of the employment experience. The work position MUST be previously evident as a career interest in the student's Educational Development Plan (EDP).

Credits will be earned toward graduation. In order to qualify for this program, students need to contact the counselor for credit approval and the Work-Based Learning Coordinator to start the application process. Students in the Work-Based Learning Program may work in a position they acquired on their own or in a position referred to them by the coordinator. In all cases the employer must be the one who agrees to offer the student a broad exposure to the total business operation and a legitimate training situation as judged by the Coordinator

VISUAL ARTS

Art Basics (A & C)

Grades 9-12

1 Trimester

The objective of the first level of art is to build on the basics learned during the middle school years. During this course, we concentrate on two-dimensional work in drawing, painting and the elements and principles of design. An introduction to projects incorporating three-dimensional elements (clay, wire, mixed media) in design will also be explored. This course will also include an art history, reading, and writing component.

Drawing/Painting (A & C)

Grades 10-12

1 Trimester *Prerequisite: Art Basics*

Painting /Drawing is also a general course of study, but with much more time is devoted to developing advanced skills in drawing and painting. The main emphasis is placed on drawing and originality. The basic areas of study are painting (acrylic, oil pastels, charcoal, chalk, ink, and watercolor), printmaking, mixed media, , and a few crafts. Studying the art masters is included. The main objective of Drawing/Painting is to develop an understanding and appreciation for arts, with an emphasis on carry-over skills. Students will work on a higher level, developing confidence and skills that are useful life long. Creativity and originality are goals. Emphasis will be placed on developing individual style, and continued practice. Developing personal art portfolios should lead to success on both a personal and public level. This course will also include an art history, reading, and writing component.

Ceramics/Sculpture (A & C)

Grades 10-12

1 Trimester *Prerequisite: Art Basics*

Ceramics/Sculpture would incorporate basic hand built skills to develop functional clay pieces as well as decorative. sculpture methods in clay, plaster and other mixed media. Making molds and casting to create sculptures are two of the techniques that will be used in this class. Students will work on a higher level, developing confidence and skills that are useful life long. The assignments are from basics to lengthier and more challenging projects. Emphasis will be placed on developing individual style, and continued practice. Developing personal art portfolios should lead to success on both a personal and public level. This course will also include an art history, reading, and writing component.

Photography/Mixed Media (A & C)

Grades 9-12

1 Trimester *Prerequisite: Art Basics*

Photography/Mixed Media would incorporate basic elements and principles of design in photography and encourage exploration with other media (presentations, exhibits, animation, filmmaking). It would be advantageous to have a personal camera for this course but it is not a necessity. As the student progresses, various techniques of developing more creative and innovative pictures will be introduced. Working in small groups to produce projects adhering to technological contend standards for the visual arts will be a course goal. Digital Photography and computer generated graphics will be goals within the course.. Students will work on a higher level, developing confidence and skills that are useful life long. The assignments are from basics to lengthier and more challenging projects. Emphasis will be placed on developing individual style, and continued practice. Developing personal art portfolios should lead to success on both a personal and public level. This course will also include an art history, reading, and writing component.

INSTRUMENTAL AND VOCAL

ARTS

Members of the Musical Performing Arts Department shall be graded according to technical skill; musical skill, participation, cooperation and effort put forth, both during class time and outside activities.

Auditions may be requested by the directors of the music department at any time if need be.

Everyone in the music department shall be expected to adhere to the performance discipline policy of the Musical Performing Arts Department.

Jazz Band (A & C)

Grades 9-12

3 Trimesters

Instructor Permission

Jazz band will consist of instrumental music students who:

1. Can read music or chords
2. Play one of the following instruments:
 - a. Saxophone
 - b. Trumpet
 - c. Trombone
 - d. Bass Guitar
 - e. Drum Set
 - f. Piano
 - g. Vibraphone

Music will be from the big band and classic jazz repertoire, with occasional pep band opportunities. Music will be prepared for all concerts, as well as special performances and contests.

Participation in the jazz band class will be limited to the standard instrumentation of a jazz band (see above) chosen by the instructor from the membership of the high school band, or extra students who qualify for supporting instruments and vocal roles with special permission. Full year participation is necessary to earn credit.

High School Band (A, B, & C)

Grades 9-12

3 Trimesters

High school band is a year long class, which includes both marching and concert band. An audition is necessary to judge the ability of the student and his/her skill. The student, as a member of the band, will be exposed to a variety of literature ranging in style, composition, and developmental level. All selections will assist the student in his awareness of style and taste, as well as instrument-specific technique. Members will participate in performances such as football games, marching exhibitions, concerts, parades, contests, and festivals. The director may request special occasions. Ambitious members will be allowed the opportunity to compete in solo and ensemble contests or All State Bands. Band participation will give the student the skills to later take part in community bands, church performance, and to use in their college and university career. Individual growth and achievement will add to the student's enjoyment. Members of the color guard who work with the high school band and are not regular instrumentalists of the program will be enrolled in the band class during the first trimester. All performances are considered to be exams and are mandatory. Students may also be assigned some theory work, given written assessments, or given playing assessments.

Concert Choir (A & C, HUS)**Grades 9-12****3 Trimesters**

Concert Choir is an academic elective and is designed to be a year-long class. The requirements include participation in choral festivals, clinics, concerts, community events, assemblies and graduation. Opportunities will be provided for members of this class to perform the National Anthem at scheduled events, compete in solo & ensemble recital festivals, choral competition and participate in choir trips designed for fine arts enhancement. All performances are a graded requirement. Participation is mandatory. Most music literature performed in the class is based on the required standards published by the Michigan School Vocal Music Association. Choral literature of all music time periods will be performed, including foreign language and multicultural pieces. Sight reading and competition pieces are high school beginner to intermediate levels.

Blue & Gold Singers (A & C, HUS)**Grades 9-12****3 Trimesters**

Blue & Gold Singers is an academic elective and it is a year-long class. It requires an audition with the Choral Director to determine vocal technique, rhythm, note reading, pitch and auditory skills. The requirements include participation in choral festivals, clinics, concerts, musicals, community events, assemblies and graduation. Opportunities will be provided for members of this class to perform the National Anthem at scheduled events, compete in solo & ensemble recital festivals, choral competition and participate in choir trips designed for fine arts enhancement. All performances are a graded requirement. Participation is mandatory. Most music literature performed in the class is based on the required standards published by the Michigan School Vocal Music Association. Choral literature of all music time periods will be performed, including foreign language and multicultural pieces. Sight reading and competition pieces are high school intermediate to advanced levels.

APPLIED ARTS / INDUSTRIAL ARTS

Computer Aided Drafting and Design CADD 1 (A & C, EMIT) Grades 9-12 1 Trimester

CAD 1 fulfills the computer literacy requirement for graduation. CADD 1 is an introductory class that introduces the language used throughout the world to convey an idea into a model. Students will learn to use CREO Parametric computer software to build sketches, 3D models and Assembly Drawings. Other areas of instruction could be included such as CO2 Laser Engraving and 3D Printing

Metal Fabrication (EMIT) Grades 9-12 1 Trimester

Metal Fabrication is to instruct students on how to cut, shape, and form metal into a useful product. Units will be taught in Sheet Metal Forming, CNC Plasma Operations, Cutting and Processing Metal, and Basic Stick and MIG Welding Processes. The skills learned can be helpful in a variety of occupations and home maintenance. Students will be expected to complete lab assignments in each of the areas. Some projects may require students to make arrangements with the instructor cover material above and beyond the required projects.

Wood Fabrication (EMIT) Grades 9-12 1 Trimesters

Wood Product Fabrication is for students who want to learn how to safely use all the woodworking machines in the school's shop and construct a project from wood. Students will be taught how to use tools and machines to shape wood into a finished product. The main project will be a variation of coffee tables, end tables or sofa tables. Instruction will be provided on the fabrication of materials, wood joinery, and characteristics and finishes that can be obtained from wood. Students will be required to make projects of good quality and to make arrangements with the instructor to cover material above and beyond the required projects.

Cabinetmaking (EMIT) Grades 9-12 1 Trimester

In this 1 trimester course students will learn the basic steps in making furniture with an emphasis on cabinet construction. Instruction will be given on the safe use of tools and joinery used in cabinet making as well as construction/installation of raised panel drawers and doors. Examples of cabinetry projects are nightstands, kitchen cabinets, mobile kitchen islands, bookshelves, etc. Students will be required to make projects of good quality and to make arrangements with the instructor to cover material cost for projects if taken home.

Advanced Woodworking/Fabrication (EMIT) Grades 10-12 1 Trimester

Prerequisite: Wood Product Fabrication/Cabinetmaking with a C or Better Grade

This class is for students who have completed and passed Wood Fabrication. It is also beneficial if the student has passed Metal Fabrication as well. The student must have demonstrated good time management skills and safe working habits to take advanced woodworking/fabrication. Students work in labs constructing projects for the school/community and sometimes personal choice projects are allowed. Projects must display an advanced level of ability. Successful Completion of the class requirements will meet the Visual, Performing, and Applied Arts requirement.

SPECIALIZED AREAS

INDEPENDENT STUDY

Independent study is a trimester offering at Shepherd that allows a student to work with a teacher to identify a desired course that exists outside the regular curriculum, to set goals or objectives in this area, and then to decide how and when to reach them.

The aim of the offering is to increase self-direction and to allow for individual interests and needs. It is a program that allows students to follow topics or interests not specifically represented in the regular curriculum. It is not an offering to be taken in lieu of a course being taught during the regular school year.

The program is open to any Shepherd student who has done the following:

1. Selected an area outside the regular school curriculum that he/she would like to explore. This area should foster creativity, curiosity, imagination, responsibility, initiative, self-discipline and love of learning.
2. Acquired an adult advisor.
3. Created a written plan with specific measurable outcomes, a plan of attack and target dates for meeting these outcomes.
4. Made a provision at the time of enrollment for the type of grading procedure to be followed by the advisor.
5. Made plans with an advisor for evaluation periods coinciding with the regular curricular report cards.

A faculty committee from the different departments and chaired by the coordinator of the Independent Study Program will be selected. It is the charge of this committee to review proposals, pass or reject those submitted for credit, and (if rejected) offer suggestions for future approval.

LINKS PROGRAM

L.I.N.K.S is a student volunteer program linking general education peers with students that have special needs. LINKS support these students throughout the school day and at lunch. Students are enrolled in a zero hour for 3 consecutive trimesters and are able to earn 1/2 elective credit for the school year. LINKS students meet with the instructor weekly/biweekly/monthly and are responsible for completing classroom requirements posted in the LINKS google classroom. In the classroom, outside of the classroom and during lunch time, students are building relationships with students with special needs. LINKS students are supporting students socially and academically too. There is a minimum of 3 large group supervised required activities per academic school year. A LINKS training happens in August prior to start of the school year. All students that are enrolled in this class are required to attend this training. The LINK program is a research-based support model that is recognized by the Michigan Department of Education.

Guided Academics (HUS)

Grades 9-12

1-3 Trimesters

Students will be provided with study skills development in addition to practical application of their skills on current course assignments. Students may also have opportunity for online credit recovery. Guided Academics is a credit bearing course and students will earn a letter grade associated with their demonstration of college and career readiness skills.

Transition Skills (HUS)

Grades 10-12

1-3 Trimesters

Students are placed into this course through an IEP. This course is designed to provide students with opportunities to develop skills to transition into the workforce. Student placement is based on interest, availability, and current employability skills. This course is credit bearing and students will receive a letter grade based on demonstration of skill acquisition.

Gratiot-Isabella Technical Education Center

PROGRAM GUIDE 2024-2025

Alma Campus
Mt. Pleasant Campus

Alma Technical Center, 1500 N. Pine Ave., Alma, MI 48801 (989) 463-7502 *** www.almaschools.net
Mt. Pleasant Area Technical Center, 1155 S. Elizabeth St., Mt. Pleasant, MI 48858 (989) 775-2210

www.mpatc.com

Gratiot-Isabella Technical Education Center

1155 S. Elizabeth St., Mt. Pleasant (989) 775-2210 - www.mpatc.com

1500 N. Pine Ave., Alma (989) 463-7502 - www.almaschools.net

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Art and Communication



Digital Media/Web Productions Graphics/Printing Communications
Interior Design

Digital Media

The Digital Media/Web Productions program is taught using a “hands-on” project-based approach to the world of information technology for business applications and multimedia design (2D, 3D, animation, motion graphics, video production and web site design and development will be explored). The program provides comprehensive skills in the design and use of information technology. Industry standard software such as: Adobe Photoshop, Animate, Dreamweaver, Illustrator, Premiere Pro, After Effects, etc. will be used to complete real-world projects.

COURSE CONTENT

- Digital Communication
- Graphic Design
- Project Management
- Customer Service & Planning
- Development Tools
- Web Site Design & Layout
- Web Development
- Web Administration
- Multimedia Production
- Design & Safety Standards
- Web Testing & Evaluation
- Technical Support

SPECIAL CLASS FEATURES

- Opportunity to participate in Business Professionals of America (BPA) Co-op opportunities available
- Job shadow opportunities available
- Opportunity to earn Visual/Performing/Applied Arts Credit
- Opportunity to earn college credit

EMPLOYMENT SKILLS FOR THE FUTURE

- Multimedia production
- Web design and development
- Self-directed and teamwork project management

Graphics/Printing Communications

This Graphics program is a dynamic opportunity to study the various methods of reproducing images by printing, duplicating, screen printing, and photography. This includes computer copy preparation encompassing the use of Adobe Photoshop, Illustrator, and InDesign, scanners and laser printers, laser engraving and bindery. This course is designed for students who have a career interest in graphic design, printing fields, commercial design, advertising layout, and packaging design. Skills in customer service, estimation, and production are developed in the student-run printing lab.

COURSE CONTENT

- Intro to design and image development
- Introduction to image output
- Introduction to finishing operations
- Employability skills and Portfolio
- Applied academics
- Industry Overview
- Safety and Health
- New Media, Advanced Design & Image Development
- Leadership
- Advanced image output
- Advanced finishing operations
- Project Management

SPECIAL CLASS FEATURES

- Real-world job production
- Printing, duplicating, screen printing and photography
- Vinyl Signage
- Co-op opportunities available
- Job shadow opportunities available
- Visual/Performing/Applied Arts
- Credit Opportunity to earn College credit
- Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

- Customer service
- Estimating job costs
- Computer copy preparation
- Scanners and laser printer
- Laser engraving
- Vinyl Signage Cutting
- Bindery

Interior Design

The Interior Design program is a creative outlet for students interested in all aspects of design. Students demonstrate creativity in many types of design projects such as hotels, restaurants studio apartments, kitchens, beach houses, living rooms, and nursery schools. Students develop skills in drafting, presentation techniques, barrier free design, specifications and material selection. Students apply the skills learned in the classroom with hands-on experience in a real world setting. Painting, hanging wallpaper and ceramic tiling are a few of the entry-level skills students will master preparing them to work in various aspects of a career in interior design. Students prepare portfolios showcasing their design strengths and abilities.

COURSE CONTENT Measurement

Techniques/ Drafting

Blueprint Symbols Circulator Pattern

Principles & Elements of Design

Color Theory

Professional design organization

Employability Skills

Advanced Tech. Skills

Interpreting prints & Specifications

Leadership and Teamwork

Codes and Barrier Free Design

Data Collection Analysis

Worksite

SPECIAL CLASS FEATURES

Interior design/drafting techniques

Kitchen Design

Barrier free design

Material selection

Computer-Aided Design

Portfolio development

Co-op opportunities available

Job shadow opportunities available

Visual/Performing/Applied Arts

Credit Senior Math Credit

Opportunity to earn College credit

Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

Painting, Hanging Wallpaper, Ceramic Tiling

Basic kitchen design

Problem-Solving

Math concepts

Blueprint reading

Basic CAD operations

BUSINESS, MANAGEMENT,
MARKETING AND
TECHNOLOGY



Accounting/Finance
Business Management and Administration Marketing

Accounting/Finance

Accounting is a career-oriented course designed for students who plan to enter any area of business after graduation or attend college. This curriculum is project based with an emphasis on problem solving. Topics covered include the accounting cycles of service organizations and merchandisers focusing on the recording of business transactions and the preparation of financial statements. Advanced topics include corporate accounting, managerial accounting, cost accounting, tax accounting, and auditing. Students participate in a number of team building activities, such as auditing and simulating real work experience. Completion of this course will prepare students for job entry and/or articulated course credits at several Michigan colleges.

COURSE CONTENT

Introduction to Accounting & Financial Reporting
Cost-Volume-Profit Analysis
Accounting Information System
Accounting for Sales and Inventory
Time Value of Money
Accounting for Fixed Assets
Accounting for Long-term Liabilities and Equity
Financial Statements
Applied Academics
Career Development (Employability, Teamwork, Leadership, Entrepreneurship)
Business and Financial Management
Technology and Safety

SPECIAL CLASS FEATURES

Real-world clients
Opportunity to participate in Business Professionals of America Co-op opportunities available
Job shadow opportunities available
Senior math credit
Opportunity to earn College credit

EMPLOYMENT SKILLS FOR THE FUTURE

Problem-solving
Basic Accounting
Payables/Receivables
Organization
Communication

Business Management and Administration

Business Management and Administration (BMA) is an advanced level business course that focuses on the opportunities and challenges of managing a business in the free enterprise system. This curriculum is project based with an emphasis on teamwork, problem solving and communications. BMA will also focus on management theory, human resource management and behavior, finance, purchasing, logistics, and production. A team of students creates a student company. The student company allows team members to become shareholders, gain leadership skills, become project managers, and to share in risk-taking, decision-making, problem solving, accounting, production, human resources, marketing, and other experiences that take place in operating a successful business. A career in BMA encompasses planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Opportunities to participate in service projects will be emphasized. Completion of this course will prepare students for job entry and/or articulated course credits at several Michigan colleges.

COURSE CONTENT

- International Business
- Information Technology and Application
- Data Management and Administration
- Business Planning and Entrepreneurship
- Human Resources / Personnel Administration
- Operations and Quality Management
- Financial Analysis and Economics
- Communications
- Business Management and Leadership
- Law, Ethics, and Government Regulations
- Project Management
- Career and Professional Development

SPECIAL CLASS FEATURES

- Opportunity to participate in Business Professionals of America (BPA)
- Real-world business development
- Co-op opportunities available
- Job shadow opportunities available
- Senior math credit
- Visual/Performing/Applied Arts
- Credit Opportunity to earn College credit

EMPLOYMENT SKILLS FOR THE FUTURE

- Problem-solving
- Leadership
- Organization
- Communication
- Teamwork

Marketing

In the Marketing program, students develop practical skills that can be applied to a broad variety of businesses. Class projects require students to apply marketing concepts such as product design, distribution, purchasing, merchandising, logistics, market research, pricing, quality service, advertising, and promotion. A hands-on approach is utilized as students operate "The School Store" and organize special events. Students are challenged to act as organizational business leaders, taking on supervisory and management roles.

COURSE CONTENT

Functions/Foundations of Marketing
Selling
Promotion and Social Media Pricing
Financial Analysis
Channel Management
Entrepreneurship, Risk Management, and Operations
Marketing Information Management
Strategic Market Planning
Product Service Planning
Human Resources, Management, and Careers
Economics

SPECIAL CLASS FEATURES

Student-run school store
Product merchandising
Advertising and promotion Inventory (ordering and tracking)
Real-world event planning
Co-op opportunities available
Job shadow opportunities available
Senior math credit
Visual/Performing/Applied Arts
Credit Opportunity to earn college credit
Opportunity to participate in Business Professionals of America (BPA)

EMPLOYMENT SKILLS FOR THE FUTURE

Customer
Service
Teamwork
Problem-solving
Organization

FAMILY & CONSUMER SCIENCE OFFERINGS



Cosmetology Criminal
Justice Culinary Arts
Educational Careers
Health Careers/CENA

Cosmetology

The Cosmetology program provides high school students with the training, classroom knowledge and hands-on experience in styling, cutting, chemical treatments, facial treatment, application of cosmetics and nail care and design Science concepts including human anatomy, physiology, histology, and bacteriology are covered and heavily relied upon throughout the course. This program prepares students to take the State of Michigan Board of Cosmetology exam. Students begin this two-year program with the completion of a full time, ten-week summer session after their sophomore year. The first year program continues during the school year for three hours per day. The second summer will be a part or full time (per instructor recommendation), eight to ten week requirement. The second school year until program completion. Students also have the option to start the summer after their junior year and finish the program as an MJ Murphy student after graduating from high school.

Students become eligible to work with patrons in the beauty college after satisfactory completion of 400 clock hours. In order to be licensed by the State, the student must complete 1500 clock attendance hours. At the time of completion the student will be eligible to take the State Board Examination.

This course is taught at the MJ Murphy Beauty College in Mt. Pleasant.

COURSE CONTENT

Cosmetology Laws & Rules/Safety &
Sanitation Client Communications/Scalp &
Hair Treatment Applied Anatomy, Physiology,
& Histology Applied Chemistry
Hairdressing/Leadership
Career Exploration/Manicure/Pedicure
Chemical Hair Restructuring
Hair Coloring
Facials/System
s Artificial Nails
Applied Anatomy, Physiology, &
Histology Applied Chemistry
Salon Management/Clinic
State Board Preparation

SPECIAL CLASS FEATURES

Hands-on experience in a real world salon
Preparation to take State Licensing exam
Visual/Performing/Applied Arts Credit
Job shadow opportunities available
Opportunity to earn college credit

EMPLOYMENT SKILLS FOR THE FUTURE

Customer Service
Teamwork Problem-Solving
Ability to communicate with diverse clientele Applied mathematics

Criminal Justice

The Criminal Justice program gives students the opportunity to explore the basic concepts and potential careers in the Criminal Justice field. The program provides instruction in law enforcement, corrections systems, and juvenile justice systems. Criminal justice is primarily an academic program with some physical fitness aspects. Students will also have opportunities for hands-on activities, such as, handcuffing, investigations, and firearms training (training weapons only). There will be multiple field trips and guest speakers to give the students firsthand knowledge of what it is like to be a police officer, corrections officer, juvenile worker, and other careers in the field.

COURSE CONTENT

Public Safety Branches

Law and Legal System

Organizational

Structure

Professional Standards including Ethics and Legal Responsibility

Safety, Health and Environment

Public Relations

Career Development

Workplace

Technology

Problem Solving / Investigations

Leadership and Team Work

Communications

Applied Academic in Law and Public Safety

SPECIAL CLASS FEATURES

Real-world experience

Guest speakers from various

fields Co-op opportunities

available

Job shadow opportunities available

Opportunity to earn College credit

EMPLOYMENT SKILLS FOR THE FUTURE

Teamwork

Communication

skills

Problem-Solving and Ethical Reasoning

Leadership

Culinary Arts

The Culinary Arts program offers students a hands-on experience in the food service industry. Students are taught the key components in food preparation and restaurant management. The students will participate in menu planning, food inventory (ordering and stock rotation) and safe food preparation. Students also learn basic preparation of a variety of ethnic food styles. Real world experience is gained by working in an on-campus, full-service restaurant. Culinary students are responsible for customer service, dining room and business management. This course prepares students for entry-level employment or a college degree focused on food design, preparation and restaurant management.

COURSE CONTENT

- Culinary Core ServSafe & Sanitation
- Guest Relations
- Basic Cooking
- Baking & Pastry
- Management
- Cost Control & Culinary Math
- Marketing & Entrepreneurship
- Advanced Cooking
- Grade Manger (Pantry Chef)
- Sustainability & Nutrition

SPECIAL CLASS FEATURES

- Completers of the two-year program will be eligible to become ServSafe Certified. Co-op opportunities available
- Job shadow opportunities available
- Opportunity to earn College credit
- Visual/Performing/Applied Arts
- Credit

EMPLOYMENT SKILLS FOR THE FUTURE

- Hands-on full-service training in student-run restaurant
- Food prep and cooking and baking
- Inventory and menu planning
- Customer Service
- Teamwork

Educational Careers

The Educational Careers course provides students an understanding of teaching as a career. Each student will have an opportunity to observe a teacher and learn teaching skills in a real world setting. Students will be placed in their home communities with an assigned mentor teacher. Through classroom activities, students will also become more aware of current trends relating to children, families, and the work place. Students must have good attendance and be able to pass a background check.

COURSE CONTENT

Human Growth and Development
Communication and
Collaboration Diversity
Classroom Management and
Guidance Applied Learning and Field
Experience Health and Safety
Employability Skills and Career Planning
Learning Environment and Climate
Ethics and Professional Responsibility
Systems and Legal Issues
Instructional Strategy/Technology
Curriculum Planning and Assessment

SPECIAL CLASS FEATURES

Work experience as a teacher assistant
Planning, preparation, and presentation of developmentally appropriate lesson plans
CPR and First Aid knowledge
An understanding of child development and classroom management techniques
Co-op opportunities available
Job shadow opportunities available
Opportunity to earn College credit
Visual/Performing/Applied Arts
Credit

EMPLOYMENT SKILLS FOR THE FUTURE

Teamwork
Communication
Work-site experience with elementary/middle school children, special needs programs, or other educational sites.

Health Careers/CENA

The Health Careers program offers students the opportunity to acquire knowledge and skills that are applicable to many health careers. In this one or two year program students will complete a core curriculum related to the Health Science Program. Topics include, but are not limited to, Medical Terminology, Medical Math, Anatomy and Physiology, Health Facility Safety, CPR and First Aid training. Students will also explore different health careers, participate in work-based learning experiences and complete a hands-on clinical experience. Students can select a curriculum path focused on becoming a CENA or another health-related career, such as pharmacy technician. At the end of the year, CENA and Pharm. Tech students will have the opportunity to become State certified. Students in this program must be able to pass a background check. Second year students may focus on a different area of Health Careers.

COURSE CONTENT

Medical Terminology
Communications
Teamwork
Safety
System
s
Legal (charting) & ethical standards
Technical skills (CPR)
Health
maintenance
Employability
Academic foundations (Anatomy & Physiology) & medical
math Work-based learning

SPECIAL CLASS FEATURES

Training and/or certification in CPR and First Aid
Certified Nursing Assistant (CNA)
Clinical experience
Guest speakers from various health career fields
Opportunity to participate in HOSA – a national health care organization for
students Co-op opportunities available
Job shadow opportunities available
Opportunity to earn College credit
Senior math credit

EMPLOYMENT SKILLS FOR THE FUTURE

Problem-solving
Patient care
Teamwork

TRADE & INDUSTRY OFFERINGS



AgriScience Automotive
Technology Construction
Trades Drafting Electronics
Machine Trades
Pre-Engineering/Mechatronics
Small Engine Technology Welding

AgriScience

AgriScience prepares students for a wide variety of careers in agriculture and animalscience. Specific areas of study include Plant/Soil Science, Veterinary Science, Agricultural Business Management, Farm Mechanics, Leadership in Agriculture, and Greenhouse/Landscape Management. Class work is supplemented by hands-on experience in on-site laboratories and greenhouses, as well as, field trips to area farms and businesses.

COURSE CONTENT

Scientific and Social Implications
Leadership, Business Education & Career Success
Organization of Living Systems
Animal Industries and Domestic Animal Production
Comparative Animal Systems and Animal Genetics
Animal Health and Nutrition
Plant
Physiology
Plant Nutrition
Pests and Pest Management
Soils
Environmental and Energy Systems
Natural Resources Fundamentals

SPECIAL CLASS FEATURES

Opportunity to participate in Future Farmers of America (FFA)
Real-world experience
Co-op opportunities available

EMPLOYMENT SKILLS FOR THE FUTURE

Self-directed participation
Leadership and Teamwork
Critical thinking and problem solving

Automotive Technology

The Auto program follows the curriculum defined by the National Automotive Technician's Education Foundation (NATEF). The following areas are covered in the two-year program (two areas per year): Steering and Suspension and Electrical (2016-2017) Brakes and Electrical (2017-2018).

The steering and suspension portion of the curriculum covers steering systems. Skill development will focus on steering, suspension, and four-wheel alignment. Skill development in the brakes segment area will focus on drum, disc, hydraulic, power assist, and anti-lock brake systems. In the electrical component of the program, students will learn fundamentals and applications in automotive electrical, electronics, voltage, current, resistance, series and parallel circuits, magnetism, application of Ohm's Law, and wiring diagrams. Lighting systems, instruments, warning devices, horn, and other accessory circuits using wiring diagrams are covered, as well as skills in diagnosis, adjustment and repair of accessory and convenience circuits. The service area lab, used by the students, is equipped with up-to-date tools and equipment. This lab provides a real world setting where students practice technical skills used in an automotive repair facility.

COURSE CONTENT

- General Electrical Systems and Theory and Operation
- Battery Diagnosis and Service
- Starting and Charging Systems Diagnosis and Repair
- Lighting Systems and Horn and Wiper/Washer Diagnosis and Repair
- Gauges, Warning Devices Diagnosis and Repair
- Accessories Diagnosis and Repair
- General Brake Systems Diagnosis and Hydraulic Systems Diagnosis and Repair
- Repair Drum and Disc Brake Diagnosis and Repair
- Power Assist Units Diagnosis and Repair
- Employability Skills and Industrial Safety
- Miscellaneous (Wheel Bearing, Parking Brakes, Electrical, etc.) diagnosis and Repair
- Electronic Brake, Traction and Stability Control Systems Diagnosis and Repair

SPECIAL CLASS FEATURES

- Preparation to take the ASE Student Certification test
- Real-world automotive service lab
- Co-op opportunities available
- Job shadow opportunities available
- Opportunity to earn College credit

EMPLOYMENT SKILLS FOR THE FUTURE

- Problem-solving and Critical Thinking
- Teamwork
- Basic auto repair strategies

Construction Trades

The Construction Trades course provides students a hands-on experience in the residential construction field. It will focus on the following areas: safety, tool use, methods of construction, foundation layout, wall and floor framing, roofing, stair construction, insulation, drywall, trim work, siding, door and window installation, shingling, and deck building. This class will address codes and inspections, blueprint reading, masonry, and other areas of construction. The hands-on building of the GI-TEC schoolhouse project gives students the skills to become employable in the construction field and/or continue in post-secondary education.

COURSE CONTENT

- Construction Materials
- Construction Tools and Equipment
- Building Construction Design – blueprint, etc.
- Site preparation and infrastructure
- Common construction practices—concepts flooring, foundation, etc.
- Residential Construction Techniques (Carpentry)
- Green Technology Construction Techniques Safety, Health, and Environmental Industry Overview
- Employability and Technology Skills
- Heavy Equipment/Civil Construction Techniques
- Construction Business Management

SPECIAL CLASS FEATURES

- Knowledge of various construction careers Carpentry
- Masonry Electrical Wiring Plumbing HVAC
- Co-op opportunities available
- Job shadow opportunities available
- Senior math credit
- Visual/Performing/Applied Arts
- Credit Opportunity to earn College credit
- Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYABILITY SKILLS FOR THE FUTURE

- Teamwork
- Problem-Solving/Troubleshooting
- Critical Thinking
- Blueprint reading
- Basic construction techniques

Drafting

Students will create plans that visually communicate how something functions or is to be constructed. This course utilizes visual problem solving and project planning for product development, architectural construction and/or other mechanical projects such as reverse engineering, product improvement, and mechanical assemblies. This course teaches entry-level job skills and prepares students for a career in Architecture, Landscaping or the Manufacturing industry.

COURSE CONTENT 2D

Drawing/CAD
Geometric Construction
Orthographic Projection
3D/Parametric Modeling
Dimensioning and Tolerancing
Supplemental Views
Architectural/Engineering Drawings
Manufacturing Process Engineering
Technology and Safety Engineering
Design Concepts Technical Materials
Research and Development
Applications Career Preparation and
Employability

SPECIAL CLASS FEATURES

Computer-Aided Design (Auto CAD)
Collaborative work with other
classes Co-op opportunities
available
Job shadow opportunities available
Opportunity to earn College credit
Senior math credit
Visual/Performing/Applied Arts
Credit
Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

Customer
Service
Troubleshooting
Creativity
Teamwork

Electronics

Electronics' students learn system installation, maintenance, operation and repair of car stereos, computers, industrial robots, electronics and test equipment. Students practice circuit construction, residential wiring, computer hardware, troubleshooting, and system design in an industrial lab. Standard equipment repair includes electric guitars, amplifiers, gaming consoles, music devices, power tools, headphones, and appliances. Additional complex equipment, such as, amplifier repair, robotics, computer interfacing, customization, digital and linear circuits, and industrial controls are also explored. The career focus of this course is preparation for an entry-level electronics technician and for post-secondary education. Advanced students serve as project leaders.

COURSE CONTENT

AC/DC--electrical fundamental (math formulas) Safety
Principles of Power Conversion--transformers
Electrical documentation/Communication--Blueprint, wiring diagrams, schematics
Electrical test equipment and measurement--power supplies, meters
Cabling and soldering--conductors
Controls--motors and logic controllers
Tools, fasteners, equipment (+safety related)
Prototype and Design and Manufacturing--devise analysis
Information Technology Application (specific IT software)
Employability skills, careers, work habits, teamwork
Problem solving and critical thinking

SPECIAL CLASS FEATURES

Real world Industrial robotics and electronics
lab Co-op opportunities available
Job shadow opportunities available
Opportunity to earn College credit
Senior math credit
Visual/Performing/Applied Arts
Credit
Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

Installer and repair
technician Trouble-shooting
Communications
Applied Mathematics
Teamwork and collaboration

Machine Trades

Machine Trades' students learn safety, manufacturing skills, and good work habits as they relate to the machine trades industry. Metal working theory and a variety of hand tools will be covered. Students will learn to operate engine lathes, vertical milling machines, drill presses, saws, and surface grinders. Other areas covered will be print reading, layout, measurement, math applications, and basic computer aided machining (CAM). Projects are designed to develop skills needed in the machine trades industry. Advanced students learn manufacturing processes, print reading, Geometric Dimensioning and Tolerance (GD&T), precision measurement, set ups, electrical discharge machine operations, tool and cutter grinding, maintenance of computer aided machining (CAM), computer-aided design (CAD), lock out/tag out, jig and fixture building, basic working of a die, and plastic mold building.

COURSE CONTENT

- Metal Working Theory/Materials
- Inspection and Measurement
- Print Reading and GD&T Bench work
- Occupational Skills/Work Habits
- Saws, Drills, and Power Tools Maintenance and Set Up
- Mill I/Lathe I
- Manufacturing Processes
- Advanced Milling/Turning/Grinding
- CNC/CAD/CAM
- Safety

SPECIAL CLASS FEATURES

- Real-world lab
- Co-op opportunities available
- Job shadow opportunities available
- Opportunity to earn college credit
- Senior math credit
- Visual/Performing/Applied Arts
- Credit
- Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

- Critical Thinking and Problem-solving
- Communication
- Teamwork

Pre-Engineering/Mechatronics

Pre-Engineering/Mechatronics is a combination of Design Software (CAD), Electronics, Electricity, Robotics, Pneumatics, and Machining. Students will complete hands-on projects to learn automated manufacturing processes and prepare for various industrial careers and post-secondary options. This STEM (Science, Technology, Engineering, Mathematics) program will give students an introduction to manufacturing and the opportunity to design, develop, build, and test devices.

COURSE CONTENT

Systems Integration/Mechatronics System Design/Prototype/CADD
Electrical/Motor Controls/VFD/Servo/Sensor Driven Mechanical Control
Systems/Electrical Controls PLC/Diagnostics
Fluid Power/Pneumatics Robotics
Electronics/Sensors Manufacturing/Machining/CNC
Quality/Measurements Blueprint/Schematics/Drafting

SPECIAL CLASS FEATURES

Real-world lab experience
Co-op opportunities
available
Job shadow opportunities available
Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

Self-directed
participation Teamwork
skills
Critical thinking and problem solving

Small Engines Technology

In the Small Engine Technology course, students learn to repair small engines and train for entry-level employment in the field. Students learn to repair two-stroke and four-stroke engines, including ignition, carburetor, and exhaust systems. In addition, this class explores two and four-cycle high performance modifications. Students build team-working skills by collaborating on projects, developing troubleshooting techniques, and excellent customer service.

COURSE CONTENT

Basic two/four-stroke operation

Fuel Systems

Ignition Systems Equipment/Technology Measuring/Conversions

Electrical Systems

Drive System

Chassis Systems Maintenance

Troubleshooting

Employability/Professional Skills Safety

SPECIAL CLASS FEATURES

Real-world experience on two-stroke and four-stroke engines Co-op opportunities available

Job shadow opportunities available

Senior math credit

Opportunity to earn College credit

EMPLOYMENT SKILLS FOR THE FUTURE

Customer

Service

Troubleshooting

Teamwork

Welding

This Welding class is designed for the student who has a genuine interest in learning welding for their future occupation. Many areas of welding including oxyacetylene, electric arc, mig, and tig, manual and automatic flame cutting are taught. This program provides students with hands on experience in a real-world lab. Students learn the fundamentals of welding theory, use of related hand tools and equipment and perform a variety of welding techniques. Class projects include fabrication and repair work. Welding students are involved in layout, inspection, measurement and design.

COURSE CONTENT

Occupational Orientation Safety and Health for Welders
Shielded Metal Arc Welding (SMAW)
Manual OxyFuel Gas Cutting (OFC)
Flux Cored Arc Welding (FCAW)
Drawing and Welding Symbols
Gas Metal Arc Welding (GMAW)
Mechanized OxyFuel Gas Cutting (OFC)
Gas Tungsten Arc Welding (GTAW)
Plasma Arc Cutting (PAC)
Weld Inspection and Testing Carbon Arc Cutting (CAC-A)

SPECIAL CLASS FEATURES

Real-world experience
Co-op opportunities available
Job shadow opportunities available Senior math credit Visual/Performing/Applied Arts Credit Opportunity to earn College credit
Opportunity to participate in MITES (Michigan Industrial and Technology Education Society)

EMPLOYMENT SKILLS FOR THE FUTURE

Communication
Detail-oriented Teamwork
Safety knowledge Creativity
Critical Thinking

Cybersecurity

Cybersecurity is about communicating, managing and being creative in a digital world. Put your skills to work and learn how to protect business assets, networks, systems, and data from criminals or unauthorized users. Learn the cybersecurity fundamentals including threat detection, digital forensics, network infrastructure, ethical hacking, and risk. Understand the importance of confidentiality, integrity and accessibility for every business and how it applies to cybersecurity. With Cybersecurity being one of the top 20 fastest growing fields in the county, it's time to get involved!

(Cybersecurity is held at the GI-TEC Mt. Pleasant Campus).