

# Warren Woods Tower High School

Warren Woods Public Schools

---

## Instructional Program Course Descriptions 2009 / 2010

### Career Pathways



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

Michael Mackenzie, *Principal*

Colleen Gruben, *Assistant Principal* • Jason Ohrt, *Assistant Principal*

Stacey Denewith-Fici, *Superintendent* • Grace Stafford, *Assistant Superintendent*

# *Nondiscrimination Policy*

In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and the Elliott-Larsen Civil Rights Act of 1977, it is the policy of the Warren Woods School District that no person shall, on the basis of race, color, religion, national origin or ancestry, gender/sex, age, disability, height, weight, or marital status be excluded from participation in, be denied the benefits of, or be subjected to discrimination during any program or activity or in employment. For information, contact (586) 439-4401.

Inquiries related to discrimination on the basis of disability should be directed to: Susan Coleman, 504 Coordinator, 12900 Frazho Rd., Warren, MI 48089. (586) 439-4464.

Direct all other inquiries related to any other discrimination to: Ms. Grace Stafford, Asst. Superintendent, 12900 Frazho Rd., Warren, MI 48089. (586) 439-4457.

---

## *Grievance Procedures*

**FOR  
TITLE VI OF THE CIVIL RIGHTS ACT OF 1964  
TITLE IX OF THE EDUCATION AMENDMENT ACT OF 1972  
SECTION 504 OF THE REHABILITATION ACT OF 1973  
AGE DISCRIMINATION ACT OF 1975  
TITLE II OF THE AMERICANS WITH DISABILITIES ACT OF 1990**

**Section I:** Any person believing that the Warren Woods School District or any part of the school organization has inadequately applied the principles and/or regulations of (1) Title VI of the Civil Rights Act of 1964, (2) Title IX of the Education Amendment Act of 1972, (3) Section 504 of the Rehabilitation Act of 1973 (4) the Age Discrimination Act of 1975, and/or (5) Title II of the Americans with Disabilities Act of 1990, may bring forward a complaint, which shall be referred to as a grievance to Civil Rights Coordinator, Grace Stafford, Assistant Superintendent, 12900 Frazho Rd., Warren, MI 48089, (586) 439-4457.

**Section II:** The person who believes a valid basis for grievance exists shall discuss the grievance informally and on a verbal basis with the Civil Rights Coordinator, who shall in turn investigate the complaint and reply with an answer within five (5) business days. If the complainant feels the grievance is not satisfactorily resolved, they may initiate formal procedures according to the following steps.

**Step 1:** A written statement of the grievance signed by the complainant shall be submitted to the local Civil Rights Coordinator within five (5) business days of receipt of answers to the informal complaint. The coordinator shall further investigate the matters of grievance and reply in writing to the complainant within five (5) business days.

**Step 2:** A complainant wishing to appeal the decision of the local Civil Rights Coordinator may submit a signed statement of appeal to the Superintendent of Schools within five (5) business days after receipt of the Coordinator's response. The Superintendent shall meet with all parties involved, formulate a conclusion, and respond in writing to the complainant within ten (10) business days of the meeting.

**Step 3:** If unsatisfied, the complainant may appeal through a signed, written statement to the Board of Education within five (5) business days of receiving the Superintendent's response in Step 2. In an attempt to resolve the grievance, the Board of Education shall meet with the concerned parties and their representative within forty (40) days of the receipt of such an appeal. A copy of the Board's disposition of the appeal shall be sent to each concerned party within ten (10) days of this meeting. The decision of the Board of Education is final.

Inquiries concerning nondiscrimination may be directed to the Regional U.S. Department of Education/Office for Civil Rights, 600 Superior Avenue East, Suite 750, Cleveland, OH 44114-2611. Anyone at any time may contact the U.S. Department of Education/Office for Civil Rights for information and/or assistance at (216) 522-4970.

The local Coordinator, on request, will provide a copy of the district's grievance procedure and investigate all complaints in accordance with this procedure. A copy of each of the acts and the regulations on which this notice is based may be found in the Civil Rights Coordinator's office.

# Introduction

This Instructional Program Handbook is designed to aide the student and parent in selecting a course of study through the four years of high school.

Please pay attention to graduation requirements and the various possible courses offered. If you take the time to study the handbook, it may save you the worry or uncertainty of not knowing what courses you need for a specific career-technical or college course of study.

## Table of Contents

Nondiscrimination Policy	2	English	33 - 37
Grievance Procedures	2	Fine Arts	38 - 43
Class Selection	4	Arts & Communication (SMTEC)	44
Graduation Requirements	5	Foreign Language	45 - 48
Classes Available by Grade	6 - 7	Health Sciences (SMTEC)	49 - 52
Educational Development Plan	8	Human Services (SMTEC)	53 - 56
SMTEC Introduction	9 - 10	Mathematics	57 - 61
SMTEC Consortium Programs	11	Physical Education	62 - 65
Career Pathway Descriptions	12 - 14	Science	66 - 70
Business Education	15 - 16	Social Studies	71 - 74
Business, Management, Marketing & Technology (SMTEC)	16 - 24	Shared Programs Non-CTE (SMTEC)	75 - 86
Engineering/Manufacturing & Industrial Technology (SMTEC)	25 - 32		

# Class Selection

The following information has been compiled with hope that it will be of some assistance to you and your parents as you prepare to select classes for your next year in high school.

You should become aware of graduation requirements, as well as the course descriptions provided in this manual, so you can discuss intelligently your class selection with your parents, counselor, and teachers. Certainly your selection of classes should be influenced by career plans, interests and abilities, as well as graduation requirements. If you have any questions before the preregistration date, you should consult your counselor before making your final decision in selecting your classes.

The following specific points might help you make more intelligent choices for your future course selections and must be considered.

1. Students who earn the required number of credits prior to the June graduation date of their class may be categorized as having graduated at the time of completion provided a written request is submitted to the principal by the parent (or guardian) at least three calendar months before the final credits are earned. This individual may, upon request, participate in the commencement exercises of his/her class in June.

2. To be awarded a diploma from high school, students must earn the number of credits required as indicated on page 2 (see Graduation Requirements). A credit to be satisfactory must be graded at a minimum of a grade of "D-". The secondary division of the school district may establish credit values and acceptance for in-school class completions, work study, summer school class completions and such other activities as are deemed eligible for credit. Students are classified by the number of credits earned by the close of the second semester of each year.

Freshman	0 - 4.9 credits
Sophomore	5 - 10.9 credits
Junior	11 - 14.9 credits
Senior	15 - 22.0 credits

3. Students receive one credit for courses which meet one period every day for two semesters, and one-half credit for those courses which meet every day for one semester. One semester courses are indicated with an asterisk. Credits will be awarded accordingly for courses that meet during the regular school day. Students receiving credit for career-technical externship education should consult course descriptions which explain credit hours awarded for this experience.

4. All students must select six classes for each semester.

5. Students should plan their schedule in accordance with their post high school plans. For example, students who plan to work should investigate our career-technical education programs. Those students planning to attend college should check the specific admission requirements for the college of their choice. Your counselor will advise you in these matters.

6. Students must consider the relationship of their abilities and interests to the courses chosen.

A. Prerequisites to courses and previous success in similar courses should be factors of consideration.

B. Any student in doubt about further courses in a particular subject area should consult with his/her teachers and counselor.

C. All teachers will be available to assist you with your course selections in the subject area.

7. Students should have tentative course plans prior to consulting with teachers and counselors.

8. Students must consider prerequisites to courses, as well as course selections appropriate to their grade levels. Example: courses listed as ninth grade offerings must be selected by ninth graders; however, tenth graders may select ninth and tenth grade classes. Eleventh graders may select ninth - eleventh grade classes and seniors may select ninth - twelfth grade classes.

# Graduation Requirements

Warren Woods Public Schools require a minimum number of credits for graduation. Within these credits there are certain courses that the Board of Education has established as required or recommended.

## *Minimum Credits (Beginning with the Class of 2011)*

	22
<b>English</b>	4
English I	1
English II	1
English III	1
English IV or English Electives	1
<b>Fine Arts Elective</b>	1
<b>Social Studies</b>	
U. S. in a Global Economy	1/2
Civic Education	1/2
American History & Geography	1
World History & Geography	1
<b>Science</b>	
Introduction to Physics	1
Biological Science	1
Physics or Chemistry	1
<b>Mathematics</b>	
Algebra I	1
Geometry	1
Algebra II	1
Math Elective in Senior Year	1
<b>Physical Education</b>	
Health/Swimming	1/2
Physical Education	1/2

# Classes Available By Grade

Classes offered in the high school are listed below by the grade in which they may first be elected. However, those classes available to ninth graders are also available to students in the upper grades.

Please note prerequisites for classes which are listed in the course descriptions.

\* - Indicates One Semester Class

A - Indicates Advanced (Honors) Class

## Ninth Grade

### Business Education

Career Planning \*  
Hospitality/Food Service  
Microsoft Office I \*  
Personal Finance \*

### Human Services

#### Career Technical Education

Consumer Education  
Nutrition Education \*  
Family Living \*  
Parenting \*  
Personal Living \*

### English

English I

### Fine Arts

Art Foundations \*  
Art II \*  
Multicultural Crafts I \*  
Multicultural Crafts II \*  
Drama  
Drawing I \*  
Drawing II \*  
Choir I (9th-12th Grade)  
Band - Marching & Symphony  
Guitar I \*  
Guitar II \*  
Music Appreciation

### Foreign Language

French I  
Spanish I  
Mandarin Chinese I

### Mathematics

Algebra I  
Algebra II A  
Geometry  
Geometry A

### Physical Education

Swim/Health \*  
Physical Education \*

### Science

Introduction to Physics  
Introduction to Physics A

### Social Studies

U.S. in a Global Economy \*  
U.S. in a Global Economy A \*  
Civic Education \*  
Civic Education A \*

## Tenth Grade

### Business Education

Accounting I

### English

English II  
English II A  
Journalism I  
Speech

### Fine Arts

Commercial Illustration I \*  
Commercial Illustration II \*  
TV Production

### Foreign Language

French II  
Spanish II  
Mandarin Chinese II

### Mathematics

Algebra II  
Algebra II A  
Extended Algebra II (1st Year)  
Geometry  
Geometry A  
Programming I \*  
Programming II \*  
Web Design I \*  
Web Design II \*

### Physical Education

Exercise Through Dance \*  
Leisure Time Sports \*  
Personal Fitness \*  
Team Sports \*  
Weight Training \*

### Science

Biology

### Social Studies

American History  
American History A

# Classes Available By Grade

\* - Indicates One Semester Class

A - Indicates Advanced (Honors) Class

## Eleventh Grade

### Business Education

Accounting II/Computerized  
Store Management  
Marketing I  
Extra Credit Union

### Engineering, Manufacturing & Industrial Technology Career Technical Education

Auto Tech I  
Building Trades I  
Drafting/CAD I  
Manufacturing Tech I

### Health Sciences Career Technical Education

Emergency Medical Services  
Health Information Services  
Medical Office Admin Asst  
Nursing  
Pharmacy Tech

### Human Services Career Technical Education

Cosmetology I  
Law Enforcement

### English

English III  
English III A

### English-Misc Electives

Creative Writing \*  
Journalism II (Newspaper)  
Journalism III (Yearbook)

### Fine Arts

Advanced Drama \*  
Advanced TV Production  
Fundamentals of Radio Broad.  
WWT Staff (Radio)

### Fine Arts Arts & Communication Career Technical Education

Visual Imaging/Graphics I

### Foreign Language

French III A  
Spanish III A

### Mathematics

Precalculus  
Precalculus A  
Algebra II  
Algebra II A  
Extended Algebra II (2nd Year)  
Programming II \*  
Probability & Statistics \*

### Physical Education

Advanced Sports Tech \*

### Science

Biology AP  
Chemistry  
Chemistry I A  
Conceptual Physics \*  
Physics  
Physics A

### Social Studies

World History

## Twelfth Grade

### Business Education

Marketing II  
Marketing Externship  
Business Services Externship  
Hospitality/Food Service  
Hospitality/Food Externship

### Engineering, Manufacturing & Industrial Technology Career Technical Education

Auto Tech II  
Drafting/CAD II  
Manufacturing Tech II  
Building Trades II  
Trade & Industry Externship

### Health Sciences Career Technical Education

Health Science Externship

### Human Services Career Technical Education

Cosmetology II (4 Hrs.)

### English

English IV  
English AP  
Mysteries and Horror  
Mythology  
Real Life Literature

### Fine Arts Arts & Communication Career Technical Education

Visual Imaging/Graphics II

### Foreign Language

French IV A  
Spanish AP

### Mathematics

Calculus AP

### Science

Biology AP  
Chemistry AP  
Environmental Science  
Forensic Science  
Genetics  
Physics

### Social Studies

American History AP  
Survey of Behavioral Science \*  
Law & Order \*

# Educational Development Plan For:

Name \_\_\_\_\_

*Ninth Grade*

*Eleventh Grade*

---

---

---

---

---

---

---

---

---

---

---

---

---

---

*Tenth Grade*

*Twelfth Grade*

---

---

---

---

---

---

---

---

---

---

---

---

---

---

Post-High School Plans \_\_\_\_\_  
\_\_\_\_\_

School Activities \_\_\_\_\_  
\_\_\_\_\_

Out-Of-School Activities \_\_\_\_\_  
\_\_\_\_\_

Hobbies and Interests \_\_\_\_\_  
\_\_\_\_\_

Employable Skills \_\_\_\_\_

# Southwest Macomb Technical Education Consortium

To Students and Parents:

The purpose of this booklet is to answer questions that students, parents, and others may have about the various Career & Technical Education courses offered through the Southwest Macomb Technical Education Consortium (SMTEC). There are many Career & Technical Education job-training programs available to students. Each course listed will give the name of the course, which school(s) in the consortium offers the course, how many credits can be earned, the grade level offered, and a course description describing the course's content. Due to the fact that three (3) districts in our consortium are on a trimester school calendar and the other one (1) district is on a traditional school calendar, we encourage you to talk with your student's counselor to determine the exact credit that may be earned for a particular course that gives a range of credit listed (i.e., 1.5-2 credits).

**The Career & Technical Education training programs are open to all 10th, 11th, and 12th graders.**

Students can select a Career Technical Education program regardless of where it is located in the Consortium. Shuttles to the various schools will be provided in most situations.

For additional information or for assistance in translating the content of this booklet, please contact the SMTEC office at (586) 439-4456 and/or your SMTEC Advisor in your local high school.

Help your student take advantage of the tremendous opportunities available to them during their high school years. Assist by guiding them in choosing a career path and selecting of courses that are meaningful in attaining their career goals.

We are here to serve you. What can we do to help?

Sincerely,  
Dale J. Dubay, Director, CTE/Career Development

## MISSION STATEMENT

The mission of the Southwest Macomb Technical Education Consortium (SMTEC) is to provide high caliber Career & Technical Education (CTE) and Career Development programs for all students within the consortium. As innovative leaders in CTE, SMTEC will continue to strive for excellence and leadership through the implementation of the various local, state, and federal initiatives.

## WEBSITE:

<http://www.macomb.k12.mi.us/warrenw/wwt/smtec/smtec.htm>

Welcome to the Southwest Macomb Technical Education Consortium (SMTEC) web site! Our web site is designed to provide Career & Technical Education (CTE) and Career Development information to students, parents, and staff in our consortium. Bookmarking the SMTEC web site is highly recommended as a site you will want to come back to use time-and-time again!

The SMTEC Web Site has three (3) major areas for use: **SMTEC** course information, **Gateway Sites**, and **Participating High Schools** web sites.

The **SMTEC** course information is presented by using the State of Michigan's six (6) sponsored Career Pathways; \*Arts & Communications, \*Business, Management, Marketing & Technology, \*Engineering/Manufacturing & Industrial Technology, \*Health Sciences, \*Human Services, and \*Natural Resources & Agriscience. Each career pathway identifies CTE courses that students can elect to take within the four (4) participating high schools, along with interests,

skills, abilities, and careers information available for that specific career pathway.

The **Gateway Sites** pages are divided into four (4) topic areas: Career Information, College Information, Financial Aid Information, and Job Search Information. All of the gateway sites have been visited by us and are our recommendations that have proven to be very helpful resources. Each of the gateway sites describe specific purposes for each of their use prior to going to the site.

The **Participating High Schools** pages has each of the SMTEC schools web site starting with their home page. The SMTEC schools consist of; Center Line High School, Fitzgerald High School, Lincoln High School and Warren Woods Tower High School. Clicking on any of the school's names will take you directly to that school's web site.

We are confident that the SMTEC web site will be a helpful resource in furthering your knowledge about Career Technical Education and Career Development.

# Southwest Macomb Technical Education Consortium

## CAREER DEVELOPMENT SUPPORT SERVICES

### **WHO can receive services?**

Special needs students who are high school Career and Technical Education or Family and Consumer Science students in need of special assistance may receive support services. Special populations students include the following:

- Academic or economic disadvantaged students
- Limited English proficient students
- Dropouts
- Special education or handicapped students
- Single parent
- Criminal offender

### **WHAT services are provided?**

- Occupational training orientation
- Assessment of occupational interests, abilities, and special needs of students seeking occupational training in Career and Technical Education or Family and

Consumer Science Programs  
-Special services, including adaptation of curriculum, instruction, equipment and facilities designed to meet the needs of students in the program  
-Guidance counseling and career development activities conducted by trained professionals who are associated with the provisions of such special services  
-Services designed to facilitate the transition from school-to-work and post school employment and career opportunities

### **WHEN are services provided?**

Career and Technical Education or Family and Consumer Science sections are chosen for the Career Development Support Services on a greatest need basis. Each section that qualifies, is assigned a paraprofessional to work within the career/tech classroom. Professional

support and guidance services are provided on a group as well as individual basis to students in qualifying sections or in the career development support services resource room.

### **WHERE are the services provided?**

The Career Development Support Services provides assistance to students from the following districts: *Center Line, Fitzgerald, Van Dyke and Warren Woods*

### **WHY are the Career Development Support Services needed?**

These services offer an entire support system for those individuals who need extra assistance to successfully complete a Career and Technical Education or Family and Consumer Science program. This assistance increases the likelihood that the qualifying students will find success in obtaining and maintaining employment.

---

## **PLEASE NOTE:**

1. Students selecting Career & Technical Education programs that are available in their home school or district, are to enroll in those programs.
2. Bus transportation is provided for students attending classes OUTSIDE of their district.
3. When a program is two years in length, juniors will have first priority in enrolling in the beginning class.
4. Tenth (10th) graders are eligible for most Career & Technical Education programs providing they are ready and **have permission and recommendation of their high school Counselor and Principal.**
5. When a program is oversubscribed, Counselors must decide which students will be enrolled. They will base their decisions on the following:
  - a) Career & Technical occupational goals
  - b) Attendance record
  - c) Performance in pre-career technical courses
  - d) Overall grade-point average

- e) General academic, physical and personal requirements of the occupation being considered
- f) Related aptitude and inventory test scores
- g) Affirmative action

In compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990, and the Elliott-Larsen Civil Rights Act of 1977, it is the policy of the Warren Woods School District that no person shall, on the basis of race, color, religion, national origin or ancestry, gender/sex, age, disability, height, weight, or marital status be excluded from participation in, be denied the benefits of, or be subjected to discrimination during any program or activity or in employment. For information, contact (586) 439-4401. Inquiries related to discrimination on the basis of disability should be directed to: Susan Coleman, 504 Coordinator, 12900 Frazho Rd., Warren, MI 48089. (586) 439-4464. Direct all other inquiries

related to any other discrimination to: Ms. Grace Stafford, Asst. Superintendent, 12900 Frazho Rd., Warren, MI 48089. (586) 439-4457.

In addition, arrangements can be made to ensure that the lack of English language skills is not a barrier to admission or participation.

### **For additional information contact:**

#### **SMTEC Administration:**

Dale J. Dubay (586) 439-4416  
Director, CTE/Career Development

#### **SMTEC Advisors::**

Marsha Young (586) 510-2205  
Center Line High School

Mary Pirrallo (586) 758-0871  
Fitzgerald High School

Sharon Huczek (586) 759-9419  
Lincoln High School

Mary Romaya (586) 439-4594  
Warren Woods Tower High School

# SOUTHWEST MACOMB TECHNICAL EDUCATION CONSORTIUM

The following programs are available to students at no charge who reside in our four district high schools:

CAREER PATHWAY	SPONSORING HIGH SCHOOLS			
	CLHS	FHS	LHS	WWTHS
<b>Arts &amp; Communication</b>				
Visual Imaging/Graphic Communications	X			
<b>Business, Management, Marketing &amp; Technology</b>				
Accounting & Computer Training*	X		X	X
Business Technology*	X	X		X
Hospitality, Personal & Culinary Service*			X	X
Merchandising & Marketing*	X	X	X	X
<b>Engineering/Manufacturing &amp; Industrial Technology</b>				
Automotive Technology*		X	X	
Building Trades			X	
Drafting/CAD*	X		X	
Manufacturing Technology			X	
<b>Health Sciences</b>				
Dental Assistant			X	
Emergency Medical Services	X			
Health Information Services				X
Medical Office Administrative Assistant				X
Nursing				X
Pharmacy Technician		X		
<b>Human Services</b>				
Cosmetology				X
Family & Consumer Sciences*	X		X	X
Law Enforcement	X			
<b>Other</b>				
Externship *	X	X	X	X

\* Students selecting these programs must enroll in their own high school or district.

# Career Pathways



## Arts & Communication

The Arts & Communication pathways are programs of study related to the humanities and to the performing, visual, literary, and media arts. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

Interests:	Skills:	Abilities:
<ul style="list-style-type: none"> <li>• Being artistic</li> <li>• Speaking in front of others</li> <li>• Working with designs</li> <li>• Frequenting movies, theatre, concerts, and art museums</li> <li>• Being self-expressive</li> <li>• Working with patterns</li> <li>• Creating things</li> <li>• Focusing on projects</li> <li>• Being flexible</li> <li>• Using imagination</li> <li>• Working with people</li> <li>• Helping others</li> <li>• Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Creating approaches to problems</li> <li>• Motivating others</li> <li>• Analyzing needs</li> <li>• Changing things to achieve goals</li> <li>• Imagining how things should work</li> <li>• Gathering and organizing information</li> <li>• Talking to others effectively</li> <li>• Being aware of others' reactions</li> <li>• Evaluating ideas</li> <li>• Writing</li> <li>• Planning</li> <li>• Managing time effectively</li> <li>• Listening to others</li> </ul>	<ul style="list-style-type: none"> <li>• Coming up with unusual or clever ideas</li> <li>• Speaking clearly</li> <li>• Communicating written ideas clearly</li> <li>• Communicating verbally in a clear manner</li> <li>• Imagining how something will look after it is rearranged</li> <li>• Reading and understanding written information</li> <li>• Originating numerous ideas on a topic</li> <li>• Recalling information</li> <li>• Distinguishing differences between colors, shades, and brightness</li> <li>• Coordinating body movements</li> <li>• Reorganizing spatial relationships</li> <li>• Seeing details of objects</li> <li>• Arranging things or actions</li> </ul>



## Business, Management, Marketing & Technology

The Business, Management, Marketing & Technology pathways are programs of study related to the business environment. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

Interests:	Skills:	Abilities:
<ul style="list-style-type: none"> <li>• Following procedures</li> <li>• Working with people and data</li> <li>• Following a set routine</li> <li>• Being detail-oriented</li> <li>• Starting up projects</li> <li>• Persuading and leading others</li> <li>• Taking risks, being visionary</li> <li>• Searching for facts and figuring out problems</li> <li>• Communicating with others</li> <li>• Helping others</li> <li>• Focusing on projects</li> <li>• Making decisions</li> </ul>	<ul style="list-style-type: none"> <li>• Using math to solve problems</li> <li>• Gathering and organizing information</li> <li>• Determining how changes affect outcomes in operation</li> <li>• Identifying the nature of problems</li> <li>• Understanding written sentences</li> <li>• Weighting costs and benefits of actions</li> <li>• Determining how money will be spent</li> <li>• Accounting for expenditures</li> <li>• Thinking critically</li> <li>• Evaluating outcomes to redirect efforts</li> <li>• Structuring and classifying information</li> <li>• Managing time effectively</li> </ul>	<ul style="list-style-type: none"> <li>• Adding, subtracting, multiplying, and dividing quickly and correctly</li> <li>• Reading and understanding information and presenting ideas</li> <li>• Communicating information and ideas clearly</li> <li>• Seeing details of objects at close range</li> <li>• Organizing problems and selecting methods or formulas to solve them</li> <li>• Applying general rules to specific problems to generate solutions</li> <li>• Managing and leading co-workers</li> <li>• Developing numerous ideas on topics</li> <li>• Figuring out problems</li> <li>• Listening to and understanding others</li> <li>• Developing an image of how a system works under ideal conditions</li> <li>• Originating unusual or clever ideas</li> <li>• Speaking clearly in front of others</li> </ul>

# Career Pathways



## Engineering/ Manufacturing & Industrial Technology

The Engineering/Manufacturing & Industrial Technology pathways are programs of study related to technologies necessary to design, develop, install, or maintain physical systems. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

<b>Interests:</b>	<b>Skills:</b>	<b>Abilities:</b>
<ul style="list-style-type: none"> <li>• Judging things by yourself</li> <li>• Being self-expressive</li> <li>• Working with data/details</li> <li>• Following set procedures</li> <li>• Working with hands and/or</li> <li>or</li> <li>• Tools and machines</li> <li>• Working with forms, designs, and patterns</li> <li>• Searching for facts</li> <li>• Figuring out problems</li> <li>• Starting up projects</li> <li>• Persuading others</li> <li>• Making decisions</li> <li>• Taking risks</li> <li>• Thinking things through</li> </ul>	<ul style="list-style-type: none"> <li>• Using math to solve problems</li> <li>• Writing</li> <li>• Gathering and organizing information</li> <li>• Using known methods to solve things</li> <li>• Understanding written sentences</li> <li>• Motivating, developing, and directing people</li> <li>• Identifying the nature of problems</li> <li>• Developing and implementing ideas</li> <li>• Listening to others</li> <li>• Talking to others effectively</li> <li>• Thinking critically</li> <li>• Installing equipment, machines, and wiring as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Communicating ideas verbally</li> <li>• Seeing details of objects</li> <li>• Grasping or assembling objects</li> <li>• Communicating written ideas clearly</li> <li>• Adding, subtracting, multiplying, or dividing quickly and correctly</li> <li>• Applying rules to problems to get solutions</li> <li>• Speaking clearly</li> <li>• Following given rules to arrange things</li> <li>• Imagining how something will look after it is rearranged</li> <li>• Creating unusual or clever ideas</li> <li>• Originating numerous ideas</li> <li>• Listening to and understanding others</li> <li>• Combining information to form conclusions</li> </ul>



## Health Sciences

The Health Sciences pathways are programs of study related to the promotion of health as well as the treatment of injuries, conditions, and disease. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

<b>Interests:</b>	<b>Skills:</b>	<b>Abilities:</b>
<ul style="list-style-type: none"> <li>• Working with others</li> <li>• Communicating</li> <li>• Giving advice</li> <li>• Explaining things to others</li> <li>• Working with hands and/or tools and machines</li> <li>• Healing people, plants and/or animals</li> <li>• Searching for facts</li> <li>• Working with ideas</li> <li>• Figuring out problems</li> <li>• Paying attention to details</li> <li>• Researching information</li> </ul>	<ul style="list-style-type: none"> <li>• Talking to others clearly</li> <li>• Looking for ways to help others</li> <li>• Thinking critically</li> <li>• Listening to others</li> <li>• Managing time effectively</li> <li>• Operating and monitoring equipment</li> <li>• Determining tools to use in certain situation</li> <li>• Organizing information</li> <li>• Being aware of others' reactions</li> <li>• Being coordinated</li> <li>• Identifying the nature of problems</li> <li>• Weighing costs and benefits of actions</li> </ul>	<ul style="list-style-type: none"> <li>• Exerting strength to lift, pull, push or carry</li> <li>• Reading and understanding information</li> <li>• Communicating clearly</li> <li>• Listening to and understanding others</li> <li>• Maintaining a positive attitude</li> <li>• Having steady hands while making arm movements</li> <li>• Grasping, manipulating or assembling objects</li> <li>• Seeing details at close range</li> <li>• Making sense of information</li> <li>• Combining and organizing information</li> <li>• Applying general rules to specific problems to generate solutions</li> <li>• Making adjustments when controlling machines or tools</li> </ul>

# Career Pathways



## Human Services

The Human Services pathways are programs of study related to economic, political, and social systems. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

<b>Interests:</b>	<b>Skills:</b>	<b>Abilities:</b>
<ul style="list-style-type: none"> <li>• Working with others</li> <li>• Communicating</li> <li>• Explaining how to do things</li> <li>• Giving advice</li> <li>• Helping others</li> <li>• Working with hands and/or tools and machines</li> <li>• Persuading others</li> <li>• Leading others</li> <li>• Working with ideas</li> <li>• Taking risks</li> <li>• Searching for facts and figuring out problems</li> <li>• Starting up projects</li> </ul>	<ul style="list-style-type: none"> <li>• Learning or teaching in various manners</li> <li>• Teaching others</li> <li>• Listening to others</li> <li>• Weighting costs and benefits of actions</li> <li>• Looking for ways to help people</li> <li>• Writing</li> <li>• Identifying the nature of problems</li> <li>• Persuading others to take different approaches</li> <li>• Talking to others effectively</li> <li>• Understanding written sentences</li> <li>• Thinking critically</li> </ul>	<ul style="list-style-type: none"> <li>• Conveying ideas verbally</li> <li>• Responding quickly</li> <li>• Communicating written ideas clearly</li> <li>• Combining information to form conclusions</li> <li>• Knowing when something is wrong or is likely to go wrong</li> <li>• Speaking clearly</li> <li>• Comprehending information</li> <li>• Seeing details at a distance</li> <li>• Imagining how something will look after it is rearranged</li> <li>• Explaining why unrelated events occur together</li> <li>• Recognizing problems</li> <li>• Making decisions</li> </ul>



## Natural Resources & Agriscience

The Natural Resources & Agriscience pathways are programs of study related to the environment and natural resources. Statistics show that people who are successful in this pathway have many of the following interests, skills, and abilities.

<b>Interests:</b>	<b>Skills:</b>	<b>Abilities:</b>
<ul style="list-style-type: none"> <li>• Enjoying nature</li> <li>• Searching for facts</li> <li>• Figuring out problems</li> <li>• Working with things/objects</li> <li>• Communicating with others</li> <li>• Explaining things to others</li> <li>• Working with hands and/or tools and machines</li> <li>• Helping others and the environment</li> <li>• Giving advice</li> <li>• Working with ideas</li> <li>• Working outdoors</li> </ul>	<ul style="list-style-type: none"> <li>• Using known methods to solve problems</li> <li>• Understanding written sentences</li> <li>• Gathering and organizing information</li> <li>• Talking to others clearly</li> <li>• Looking for ways to help others</li> <li>• Identifying the nature of problems</li> <li>• Determining equipment needed for a job</li> <li>• Maintaining equipment as needed</li> <li>• Identifying essential information</li> <li>• Thinking critically</li> <li>• Listening to others</li> </ul>	<ul style="list-style-type: none"> <li>• Listening and understanding information and ideas presented by others</li> <li>• Speaking clearly</li> <li>• Communicating ideas so others will understand</li> <li>• Reading and understanding written information</li> <li>• Communicating written ideas clearly</li> <li>• Predicting when something is wrong or may go wrong</li> <li>• Combining information to form conclusions</li> <li>• Making sense of information</li> <li>• Applying rules to specific problems to come up with solutions</li> <li>• Following given rules to arrange things</li> <li>• Seeing details of objects</li> </ul>

# Business Department

## Course Offerings

2009/2010

### Business Education Department

Extra Credit Union

### SMJEC

#### Business, Management, Marketing & Technology

Accounting I	Hospitality/Food (Personal & Culinary) Service I, II, III
Accounting II/Computerized	Hospitality/Food Service Externship
Advanced Word Processing *	
Advanced Spreadsheet Applications *	Management Accounting *
	Microsoft Office I *
Business Law *	
Business Ownership *	Personal Finance *
Business Externship	Photo Editing & Publishing *
	Web Page Design I & II
Career Management *	Merchandising & Marketing I & II
Career Planning *	Marketing Externship
Computer Applications I & II *	Store Management/Operations
Entrepreneurship *	

*\* Indicates One Semester Course*



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Business Education Department

## Course Descriptions

### EXTRA CREDIT UNION - Course #6947/48 - 1 Credit, 1 Year, Grades 11-12



Students will be trained to run the EXTRA Credit Union Branch that is located within the high school. Training will include cash handling and member transactions in a professional and confidential manner. Students must be in grades 10, 11, or 12 with a minimum grade point average (GPA) of 2.0, have good basic math skills and an excellent attendance record. Once accepted, students will take part in a mandatory training session that will occur during school hours. The parents of the students must also sign a permission slip that allows their children to take part in the program.

This one year, elective course is designed to help students become knowledgeable within various aspects of business and finance. The students will learn and exercise skills while in a real-life business setting in order to provide financial services to member of EXTRA Credit Union within the high school.

## S M J & C - Business, Management, Marketing and Technology

### Course Descriptions

#### ACCOUNTING I - Course #6921/22 (SMTEC: CLHS, LHS, WWT) – .5-1.5 Credits, 1-3 Semesters, Grades 10-12 Meets VPAA One (1) Credit Graduation Requirement (WWTHS Only)



This course helps the student develop a means of keeping and interpreting financial records of a business. Accounting is looked at as a career. The complete accounting cycle for a service and a merchandising business is taught including the preparation of payroll records. Each type of business is presented in a complete accounting cycle that covers analyzing transactions, journalizing, posting, petty cash, financial statements, and adjusting and closing entries.

#### ACCOUNTING II/COMPUTERIZED - Course #6923/24 (SMTEC: CLHS, LHS) – 1-1.5 Credits, 2-3 Semesters, Grades 11-12



Building on the knowledge of accounting systems gained through the completion of Accounting I, the student will explore accounting for property, inventory, accounts receivable, notes receivable and notes payable. Students will learn the differences in accounting for privately owned companies versus corporations. Completion of the second year prepares the student for an entry level accounting clerical position and/or entrance into a college business program. Students will gain experience in posting business transactions, payroll, accounting, adjustments, partnerships, corporation accounting, automated accounting and other procedures referring to financial accounting. Topics will include management accounting, cost accounting, not-for-profit accounting, and financial accounting.

**Prerequisite:** Accounting I



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# S M J & C - Business, Management, Marketing and Technology

## Course Descriptions

### **ADVANCED WORD PROCESSING - Course #6740** **(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 10-12**



The goal of this course is to prepare students for the opportunity to become a Certified MS Word user. During the last 2 weeks of the course, practice tests will be offered in order to prepare students to pass the MOS Certification exam. Employers today are seeking workers with the MOS Certification. Also, students who pass the certification test can earn COLLEGE CREDIT. The course will focus on the advanced features of MS Word, which are document enhancement, table management, column management, visual enhancements including WordArt, graphics, and diagrams, mail merge, workgroup collaboration, advanced text and document handling, document styles and macros. Additionally, students will learn group editing, document distribution, advanced workgroup collaboration, forms tables, indexes and referencing, advanced document and data tables.

**Prerequisite:** Computer Applications

### **ADVANCED SPREADSHEET APPLICATIONS – Course #6797** **(SMTEC: CLHS) – .5 Credit, 1 Semester, Grades 10, 11, 12**



The goal of this course is to prepare students for the opportunity to become a Certified MS Excel user. During the last 2 weeks of the course, practice tests will be offered in order to prepare students to pass the MOS Certification exam. Employers today are seeking workers with the MOS certification. Also, students who pass the certification test can earn COLLEGE CREDIT. The course will focus on the advanced features of MS Excel, which are how to manage display properties, advanced calculation techniques, worksheet data manipulation, outlining worksheets, publishing workbook as a Web page, creating and modifying a chart and drawing objects. Additionally, students will learn template and database integration, shared workbooks, consolidating data across workbooks, data analysis and automation, data importing and querying, pivot tables, macros, and data analysis tools.

**Prerequisite:** Computer Applications

### **BUSINESS OWNERSHIP – Course #6798** **(SMTEC: CLHS) – .5 Credit, 1 Semester, Grades 10, 11, 12**



This is a specialized business course designed to enable students to acquire the knowledge and develop the skills needed to effectively organize, develop, create, and manage their own business. Topics addressed include the assessments of entrepreneurial skills, the importance of business ethics, and the role of entrepreneurs in a free enterprise system. Students will develop a written business plan for a business of their choice. Instructional strategies may include a school-based enterprise, computer/technology applications real and/or simulated occupational experiences, and projects available through the DECA programs of co-curricular activities.



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**BUSINESS LAW – Course #6970**  
**(SMTEC: CLHS, LHS) – .5 Credit, 1 Semester, Grades 11-12**



Business Law is an overview of the U.S. legal system; primarily as it pertains to the conduct of business and the rights of the individuals involved in business. Specific areas of law covered include contract, property and employment law. Additional topics of current legal interest will also be examined. Recommended for all students.

**BUSINESS EXTERNSHIP - Course #6785/86**  
**(SMTEC: CLHS, LHS, WWT) - 1.5-2 Credits, 2-3 Semesters, Grade 12**



Students work part-time in an office environment and earn at least minimum wage and credit toward graduation. This course needs to be taken concurrently with a CTE approved course. An average of 10 work hours is needed each week.

**Corequisite:** Students must be enrolled in the capstone class (i.e. Voc. II class) of their CTE program.  
**Prerequisite:** Students must have completed 50% of a CIP program (i.e. Voc I class) in their 11th grade year. Minimum 2.0 GPA with **teacher permission is required.**

**CAREER MANAGEMENT – Course #6916**  
**(SMTEC: LHS) – .5 Credit, 1 Semester, Grades 9-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement**



Ever hear the question, “What do you want to be?” Design your own future. Career Management helps students design an achievable career goal, which is especially designed to match individual personality traits using career pathways. Personal goals are matched to anticipated life-styles. Using “Options After High School”, students will explore many career avenues upon graduation. Grants, scholarships, and student loans are but a few of the funding types that are investigated. Employability skills are examined and enhanced. Students will engage in interactive activities, utilize the Internet, use a variety of technologies, and gather data in research activities. The EDP process is integrated within the activities as students access Career Cruising. Students will utilize various communication tools such as web blogs, discussion boards, and pod casting.

**CAREER PLANNING – Course #6752**  
**(SMTEC: WWT) – .5 Credit, 1 Semester, Grades 9-12**



This class enables the student to define and clarify occupational goals. Each individual will be able to evaluate their own career “readiness” through an assessment of their personality traits, occupational interests, and career awareness. Students will explore job descriptions, projected job outlook and salaries. Evaluation and creation of resumes and cover letters will also be stressed, along with interviewing skills, health and safety at the workplace, work ethics, technology in the work place, time management, teamwork, and leadership skills. Students will also be utilizing the career center as well.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**COMPUTER APPLICATIONS I – Course #6919**  
**(SMTEC: CLHS, LHS) – .5 Credit, 1 Semester, Grades 9-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement**



Are you technologically challenged? If so, the answer is simple to becoming computer literate by learning the basics of Word Processing (Microsoft Word), Spreadsheet (Microsoft Excel), Database Management (Microsoft Access), and Presentation Management (Microsoft PowerPoint).

**Suggested Prerequisite:** Keyboarding skills or Administrative Support I

**COMPUTER APPLICATIONS II– Course #6920**  
**(SMTEC: LHS) – .5 Credit, 1 Semester, Grades 9-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement**



Do you want to improve your employment opportunities? You can become industry certified in Microsoft productivity tools by increasing your technological savvy in this course. You will learn and apply highly developed skills in: Advanced Word Processing (Microsoft Word), Advanced Spreadsheet (Microsoft Excel), Advanced Database Management (Microsoft Access), and Advanced Presentation Management (Microsoft PowerPoint).

**Prerequisite:** Successful completion of Computer Applications I

**ENTREPRENEURSHIP - Course #6914**  
**(SMTEC: CLHS, LHS) - .5 Credit, 1 Semester, Grades 10-12**



This course teaches students how to start their own business. Students will receive a brief introduction to the business world and will explore and analyze various business plans. The course begins with a brief introduction to a business plan as an important tool necessary for new businesses to obtain financing. Students will gain insight and knowledge through a business simulation, field trips, speakers and interviewing entrepreneurs. Students will be working on a computer simulation where they will apply business decisions in a competitive framework to learn how to make a profit.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**HOSPITALITY/FOOD (Personal & Culinary) SERVICE I - Course #6827/28**  
**(SMTEC: LHS, WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



The first year Hospitality/Food (Personal & Culinary) Service program is designed to teach high school students the management/culinary skills needed for a career in the restaurant and food service industry. Year One of our ProStart curriculum allows students to meet the National Restaurant Association academic standards, complete a checklist of competencies, and participate in at least four hours of practicum service to ensure all students are well qualified to enter the industry workforce.

Students will run a fully functional Macomb County Restaurant for lunch, (WWT) The Titan Terrace or (LHS) The Abe & I. Employability skills are examined and enhanced when using what they study in the classroom and apply it to practical experiences and real life application in the commercial kitchen and restaurant.

A student successfully completing this class will be ready to go on to the advanced Hospitality/Food (Personal & Culinary) Services II course and an externship job placement in their senior year.

**HOSPITALITY/FOOD (Personal & Culinary) SERVICE II - Course #6829/30**  
**(SMTEC: LHS, WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Year two of the Hospitality/Food (Personal & Culinary) Service program is an advanced culinary course designed to further teach high school students the management/culinary skills needed for a career in the restaurant and food service industry. Year Two of our ProStart curriculum allows students to meet the National Restaurant Association academic standards, complete a checklist of competencies, and participate in at least four hours of practicum service to ensure all students are well qualified to enter the industry workforce.

Students will run a fully functional Macomb County Restaurant for lunch, (WWT) The Titan Terrace or (LHS) The Abe & I. Employability skills are examined and enhanced when using what they study in the classroom and apply it to practical experiences and real life application in the commercial kitchen and restaurant.

A student successfully completing this class will be ready to go on to the advanced Hospitality/Food (Personal & Culinary) Services II course and an externship job placement in their senior year.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**HOSPITALITY/FOOD (Personal & Culinary) SERVICE III (ADVANCED) - Course #6831/32**  
**(SMTEC: WWT) - 1-1.5 Credits, 2-3 Semesters, Grade 12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Year three of our Hospitality/Food (Personal & Culinary) Service program is an advanced culinary course designed to further teach high school students the management/culinary skills needed for a career in the restaurant and food service industry. A Continuation of our Year Two of our ProStart curriculum allows students to meet the National Restaurant Association academic standards, complete a checklist of competencies, and participate in at least four hours of practicum service to ensure all students are well qualified to enter the industry workforce.

Students will run a fully functional Macomb County Restaurant for lunch, (WWT) The Titan Terrace or (LHS) The Abe & I. Employability skills are examined and enhanced when using what they study in the classroom and apply it to practical experiences and real life application in the commercial kitchen and restaurant.

A student successfully completing this class will be ready to go on to the advanced Hospitality/Food (Personal & Culinary) Services II course and an externship job placement in their senior year.

**HOSPITALITY/FOOD SERVICE EXTERNSHIP - Course #6779/80**  
**(SMTEC: LHS, WWT) - 1.5-2 Credits, 3-4 Semesters, Grade 12**



Students with the desire to continue in any area of the Hospitality/Food Service industry after graduation may apply for the externship program. Personnel and management techniques are studied while the student works out in the field at a job placement. An average of 10 work hours is needed each week.

**Corequisite:** Students must be enrolled in the capstone class (i.e. Voc. II Class) of their CTE Program

**Prerequisite:** The student must have completed 50% of a CIP program (i.e. Voc. I class) in their 11th grade year. Minimum 2.0 GPA with **teacher permission is required.**

**MANAGEMENT ACCOUNTING – Course #6739**  
**(SMTEC: LHS) – .5 Credit, 1 Semester, Grades 10-12**



The course is designed to build on the student's understanding of the accounting principles taught in Accounting I by further exploring the content and intent of business financial statements. As opposed to the technical or bookkeeping nature of Accounting I, considerable time will be spent focusing on the analyzing and communicating of financial information. In order to communicate effectively as an accountant, it is imperative that the accountant understands the needs of various users of its information. As such, the course will include activities designed to enhance the student's understanding/appreciation of the importance of the information. This course is designed to promote the professional nature of accounting. It would represent the first significant exposure within the accounting curriculum to the higher-level skills utilized by accountants. For the student who is considering business, particularly accounting/finance, and this class will allow them to better evaluate accounting as a professional career rather than as a technical skill.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**MICROSOFT OFFICE I - Course #6759**  
**(SMTEC: WWT) – .5 Credit, 1 Semester, Grades 9-12**



In the first semester the student will have the opportunity to use two of Microsoft Office 2000's software packages: 1) Microsoft Word, which will offer the student skills to key/edit text, to revise/format documents and print; 2) Using Excel, an electronic workbook, the student will be able to produce professional worksheets and reports.

**PERSONAL FINANCE – Course #6751**  
**(SMTEC: LHS, WWT) – .5 Credit, 1 Semester, Grades 9-12**



Students explore many facets of financial decision-making involved in daily life. Skills in money management, record keeping, and banking are enhanced through the study of basic concepts of finance, insurance, credit, and other related topics. The course will also prepare students occupationally to plan, manage, and analyze the financial and monetary aspects and performance of business enterprises, banking institutions, or other organizations. Students will use the Internet, Excel, multimedia tools, and play an interactive stock market game.

**PHOTO EDITING & PUBLISHING – Course #6769**  
**(SMTEC: LHS) – .5 Credit, 1 Semester, Grades 9-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement**



Do you want to improve your photo editing skills? Would you like to create professional publications? This class can help you develop your creative abilities with Photo Editing with Fireworks software, Designing dynamic presentations using PageMaker software, Digital camera and scanner use.

**WEB PAGE DESIGN I - Course #6959**  
**(SMTEC: CLHS, LHS) - .5 Credit, 1 Semester, Grades 10-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement (LHS Only)**



This information technology course introduces students to the design and development of digital design (Web pages). Students will learn how to design and create basic Web pages, and to administer and update existing sites using Microsoft FrontPage software. Students will also learn the fundamentals of Web publishing, from laying out and formatting text to enlivening pages with graphics. Students will progress to the “producer” level in Web page and site development.

**Prerequisite:** Successful completion of Middle School technology course and/or keyboarding skills.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**WEB PAGE DESIGN II - Course #6960**  
**(SMTEC: CLHS, LHS) - .5 Credit, 1 Semester, Grades 10-12**  
**Meets VPAA One-Half (1/2) Credit Graduation Requirement (LHS Only)**



Web Page Design II is an advanced study in digital design skills including development theory, design, project management and communication. Students will learn how to use Macromedia software (Dreamweaver MX, Flash MX, Fireworks, Director and Cold Fusion) to prepare for careers in the information technology field.

**Prerequisite:** Successful completion of Web Design I.

**MERCHANDISING & MARKETING I - Course #6939/40**  
**(SMTEC: CLHS, FHS, LHS, WWT) - .5-1.5 Credits, 1-3 Semesters, Grades 10-12**  
**Meets VPAA One-Half (1/2) or One (1) Credit Graduation Requirement**



This course is the study and understanding of marketing and business management. It is a comprehensive course that studies selling, purchasing, displays, inventory control, promotion, distribution, and each of the other functions of marketing. Students will not only learn about the concepts of marketing, but will gain knowledge about the skills needed to secure and sustain employment.

**MERCHANDISING & MARKETING II - Course #6941/42**  
**(SMTEC: CLHS, LHS, WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Students who successfully complete Merchandising & Marketing I or are interested in a career in Marketing may elect Merchandising & Marketing II, which may also include Marketing Externship “on the job” program. Students are placed in a local business that is directly or indirectly associated with marketing of goods and/or services. Marketing II has an emphasis on entrepreneurship, marketing information management, pricing and product planning, and financial services.

**Suggested Prerequisite:** Merchandising & Marketing I

**MARKETING EXTERNSHIP - Course #6787/88**  
**(SMTEC: CLHS, LHS, WWT) - .5-2 Credits, 2-3 Semesters Grade 12**



Students work part-time in a Marketing job and earn at least minimum wage and credit toward graduation. This course needs to be taken concurrently with Merchandising & Marketing II, or Store Management. An average of 10 work hours is needed each week.

**Corequisite:** Students must be enrolled in the capstone class (i.e. Voc. II class) of their CTE program.

**Prerequisite:** Students must have completed 50% of a CIP program (i.e. Voc. I class) in their 11th grade year. Minimum 2.0 GPA with **teacher permission is required.**



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J & C - Business, Management, Marketing and Technology*

## *Course Descriptions*

**STORE MANAGEMENT/OPERATIONS - Course# 6945/46**  
**(SMTEC: CLHS, FHS, LHS, WWT) - .5-1 Credit, 1-2 Semesters, Grades 11-12**  
**Meets VPAA One-Half (1/2) or One (1) Credit Graduation Requirement**



Store Management will provide a real-life situation for Marketing Education students in every aspect of merchandising practices and procedures. The student will gain management experience as a leader in the school store. The student will gain leadership, planning, supervisory, budgeting, and decision making skills. The school store will provide experience, pre-employment training, and the opportunity to learn management skills and decision-making.

**Prerequisite:** Merchandising & Marketing I or taken concurrently with Marketing I.  
**This course may require the permission of the Marketing instructor.**



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# ***Engineering/Manufacturing & Industrial Technology***

## ***Course Offerings***

**2009/2010**

### ***Industrial Technology***

Drafting I

### ***SMJEC Engineering/Manufacturing & Industrial Technology***

Auto Technology I - ASE/NATEF Certified  
Auto Technology II - ASE/NATEF Certified  
Auto Technology III - ASE/NATEF Certified  
Externship, AYES Internship

Automotive Technology: Engine Repair  
Automotive Technology: Suspension & Steering, Auto. Brakes

Building Trades I & II  
Computer 3D Animation (3D Studio MAX)  
Drafting I/CAD  
Drafting II/CAD  
Drafting III/CAD

Manufacturing Technology I & II

Trade & Industry Externship

***Career/Technical programs are available to 10th graders  
with counselor's recommendation and principal's approval***



Arts &  
Communication



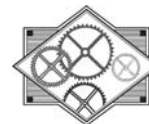
Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Industrial Technology

## Course Descriptions

**DRAFTING I - Course #0125/0130  
(LHS) 1 Year, 1 Credit**

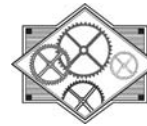


This course is designed to develop visualization and board drafting skills which are necessary for careers which involve manufacturing and engineering. It will provide the drafting skills necessary as a foundation for Drafting II and CAD Drafting.

# S M J & C - Engineering/Manufacturing and Industrial Technology

## Course Descriptions

**ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY I - Course #6801/02  
(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 10-12  
Meets VPAA One (1) Credit Graduation Requirement**



**Introduction to Automotive Technology** – An instructional unit which is to include instruction on fundamental skills necessary to be successful in the automotive service industry. The course will include instruction on the use of hand tools, fasteners, hoists, jacks, wiring, safety, and shop orientation. Basic automotive service skills including tire service, preventative maintenance, basic electricity, and cooling system service will be included. With successful completion of semester one, students will have basic automotive employability requirements.

**Brakes** – An instructional unit which is designed to introduce the principles and operation and servicing of brake systems. Upon completion of this course, students will demonstrate an understanding and service knowledge of disc brakes, drum brakes, hydraulic systems and electrical components relating to brake systems. Electronic ABS will be covered with emphasis on diagnosis and repair. This course instruction will include 50% hands-on training. Special emphasis will be given to safety procedures, specialty tools, and equipment used in this service area.

**Steering and Suspension** - An instructional unit, which is designed to teach the operating principles and repair of steering and suspension systems, wheel alignment, and balance. Topics for this course include wheel balancing, wheel alignment, suspension systems, steering systems, specialty tools, equipment and supplies used to service steering and suspension systems.

*\*50% of class time will be hands-on lab experience*



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services

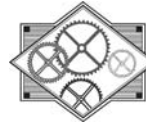


Natural Resources & Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY II - Course #6803/04**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



**Engine Performance** – An instructional unit which is designed to teach the operating principles and service procedures of engine fuel and ignition systems, emission controls, basic drivability and diagnosis. Students will gain hands-on skills with manufacturers’ specialty tools, equipment, and supplies used in servicing these automotive systems.

**Electrical and Electronic Systems** – An instructional unit which is designed to teach the principles and operation of basic automotive electrical and electronic systems. Students will gain practical experience in the diagnosis, repair, and service of electrical circuits. Topics in this course include electrical test equipment schematics, test procedures, batteries, starters, alternators, ignition systems, lighting, accessory circuits, and electronic test procedures.

*\*50% of class time will be hands-on lab experience*

**ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY III - Course #6805/06**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grade 12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This Advanced Studies instructional unit is designed to reinforce the principles and services procedure taught during the first two years of the program in brakes, steering and suspension, electrical and electronics, and engine performance systems. This course also focuses on the advanced principles and services procedures used to repair today’s technically advanced vehicles. With a strong emphasis placed on ABS brake systems, fuel management, and electrical controlled suspension systems.

**EXTERNSHIP, AYES INTERNSHIP - Course #6883/84**  
**(SMTEC: FHS) - 1.5-2 Credits, 2-3 Semesters, Grade 12**



Gives the senior automotive student the time and opportunity to gain experience in the real world of work. The above options will be monitored and will enhance the seamless transition between school and work. It is expected that the students will continue their education on the post secondary level as part of the above program.

IN THE SPRING OF THE JUNIOR YEAR, STUDENTS HAVE THE OPPORTUNITY TO BE PLACED WITH AYES (Automotive Youth Education Systems) DEALERS. AYES is a dynamic partnership among participating automotive manufacturers, participating local dealers, and selected local high schools/tech prep schools. The goal: to encourage bright students with a good mechanical aptitude to pursue careers in the ever-changing fields of automotive service technology and to prepare them for entry-level positions in a new car dealership or pursue challenging academic options.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**AUTOMOTIVE TECHNOLOGY: Engine Repair - Course #6955/56**  
**(SMTEC: LHS) – 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



**Engine Repair:** A course designed to teach the principles and procedures required to completely rebuild an automotive engine. Students will gain practical experience in engine diagnosis, disassembly, inspection techniques, assembly start-up and adjustment procedures. Special emphasis will be placed on safety procedures, specialty tools, fasteners and equipment used during engine repair.

Students who complete the course and pass the State of Michigan's licensing exam for this area will be awarded their automotive mechanic's license in Engine Repair by the State of Michigan.

**AUTOMOTIVE TECHNOLOGY: Suspension & Steering, Auto. Brakes - Course #6957/58**  
**(SMTEC: LHS) – 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



**Suspension and Steering:** A course designed to teach the operating principles and repair of steering and suspension systems, wheel alignment, and balance. Topics for this course include: wheel alignment, suspension systems, steering systems, speciality tools, equipment and supplies used to service steering and suspension systems.

**Automotive Brakes:** A course designed to introduce the principle operation and servicing of brake systems. Upon completion of this course, students will demonstrate an understanding and service knowledge of disc brakes, drum brakes, hydraulic systems and electrical components relating to ABS brake systems. Special emphasis will be given to safety procedures, specialty tools and equipment used in this service area.

Students who complete the course and pass the State of Michigan's licensing exam for these areas will be awarded their automotive mechanic's license in Suspension and Steering and/or Automotive Brakes by the State of Michigan.



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**BUILDING TRADES I – Course #6811/12**  
**(SMTEC: LHS) – 1.5 Credits, 3 Semesters, Grade 10-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Building Trades I is an introductory program that focuses on basic shop and site safety, career opportunities, post secondary training opportunities, hand and power tool use and safety, blueprint interpretation, leveling instruments, site layout, specifications, footings, foundations, rough framing, roofing materials and applications, windows and doors, types of installations, interior and exterior finishing, thermal and sound insulation, and stair construction.

**General Qualifications:** An interest in learning the skills and knowledge related to the construction industry. Average physical condition, average mechanical aptitude, average manual dexterity, able to tolerate dust, willing to work with actual building materials along with being willing to work out doors.

**BUILDING TRADES II – Course #6813/14**  
**(SMTEC: LHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Building Trades II allows the student to reinforce and deepen their basic skills as well as allowing them to acquire advanced skills and knowledge. There is emphasis on using small subgroups within the class to help encourage second year students to develop their ability to lead as well as follow to accomplish set goals.

**General Qualifications:** Average physical condition, average mechanical aptitude, average manual dexterity, able to tolerate dust, willing to work outdoors, and work with actual building.

\*\*\* *The Building Trades course offers apprenticeship training in partnership with Associated Builders and Contractors, Inc. for 11th and 12th grade students. Upon successful completion of training program, and high school graduation, students may continue apprenticeship at second year level - leading to journeyman status or enter a community college and apply apprenticeship credits toward a two-year degree.*

\*\*\* *Students may also enter the Detroit Carpenters Apprenticeship Training program (union) and complete a four-year apprenticeship to receive their journeyman status. Students who are 17 years old by June of their junior year, may opt to be employed through the program during the summer between their 11th and 12th grade.*

\*\*\* *Students enrolled in apprenticeship training receive paid work experience while accumulating on-the-job training hours necessary to become a journeyman.*



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**COMPUTER 3D ANIMATION (3D STUDIO MAX) - Course #6731/32**  
**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



If you are interested in Hollywood animation, crime scene, reconstruction, architectural fly through, developing training videos, and commercials, or you just like to be creative on a computer, then this course is for you!

Learn on one of the industries best computer imaging and animation software. Make drawings and presentations that come to life and communicate your ideas. You will create animation of models using skills learned in this class.

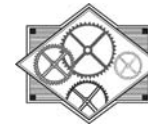
**DRAFTING I/CAD (VOCATIONAL) - Course #6815/16**  
**(SMTEC: CLHS, LHS) - 1.5 Credits, 3 Semesters, Grades 10-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course is designed to introduce students to AutoCAD software and expand the student's understanding of Orthographic Projection. Skill emphasis is placed upon ANSI & SI measurement, freehand sketching, use of work lines for projection, single and double auxiliary view development, section views, dimensioning techniques, ISO symbols, threads & fasteners, basic detailing and an introduction to descriptive geometry. Students should be able to transfer board drawings to CAD formats. Student competitions include ASBE and MITES.

**Prerequisite:** Completion of a Drafting class with a "C" average per semester

**DRAFTING II/CAD (VOCATIONAL) - Course #6817/18**  
**(SMTEC: CLHS, LHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course is designed to prepare students for Advanced Placement Examinations offered by Macomb Community College. Skill emphasis is placed upon Jig/Fixture Detailing and Assembly, Auto Body Design fundamentals, 3D Solids modeling using Auto CAD Inventor, parametric design, presentation drawings, advanced descriptive geometry, sheet-metal pattern developments, cardboard modeling and calculations of tolerance and fits. Students must transfer board drawings to CAD formats. Student competitions include ASBE and MITES. Students enrolled in this class are encouraged to be enrolled in an externship position.

**Prerequisite:** Completion of Vocational Drafting I with a "C" average or better.  
 Suggested completion of Algebra II with a "C" average or better.

\*\*\* *Advanced Placement is offered through an articulation agreement between Macomb Community College and Van Dyke Public Schools and Center Line Public Schools. AP credit requires students to take examinations for each class in which they choose to receive AP credit. Upon passing AP exams students will have credit applied to their transcripts per current Macomb Community College policy.*



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**DRAFTING III/CAD (VOCATIONAL) - Course #6819/20**  
**(SMTEC: LHS) - 1.5 Credits, 3 Semesters, Grade 12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Students must agree upon a terminal project with the course instructor which will be used to enhance the student's portfolio. The project must include 3D Solids modeling, parametric design and a presentation package for competitions. The ASBE competition problem must be completed using CAD. This course is designed to prepare students for Advanced Placement Examinations offered by Macomb Community College. Student competitions include ASBE and MITES. Students enrolled in this class are encouraged to be enrolled in an externship position.

**Prerequisite:** Completion of Vocational Drafting II with a "C" average or better.  
 Suggested completion of Algebra II with a "C" average or better.

\*\*\* *Advanced Placement is offered through an articulation agreement between Macomb Community College and Van Dyke Public Schools. AP credit requires students to take examinations for each class in which they choose to receive AP credit. Upon passing AP exams students will have credit applied to their transcripts per current Macomb Community College policy.*

**MANUFACTURING TECHNOLOGY I - Course #6871/72**  
**(SMTEC: LHS) - 1.5 Credits, 3 Semesters, Grades 10-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Students will receive training in all aspects of Manufacturing, metal machine operations and welding. Specific skills will be developed on the milling machine, lathe, drill press, hand tools, and precision measuring instruments. Related subject and training area will include Plastics. Student competition will include MITES and/or SKILLS USA.

**Prerequisite:** Students need a good attitude towards work and good attendance

**MANUFACTURING TECHNOLOGY II - Course #6873/74**  
**(SMTEC: LHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course is an extension of Manufacturing Technology I. The basic skills of the first course will be refined and more complex projects and problems will be covered. There will be an in-depth study of computer-numerical controlled machining, followed by hands-on training on the CNC milling machine. Students may elect to participate in job shadowing, externship, and/or apprenticeships. Student competition will include MITES and/or SKILLS USA.

**Suggested Prerequisite:** Students need a good attitude towards work and good attendance



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services

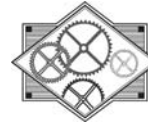


Natural Resources & Agriscience

# *S M J E C - Engineering/Manufacturing and Industrial Technology*

## *Course Descriptions*

**TRADE & INDUSTRY EXTERNSHIP - Course #6783/84**  
**(SMTEC: CLHS, FHS, LHS, WWT) - 1.5-2 Credits, 2-3 Semesters, Grade 12**



Students receive paid part-time work experience in their CTE area, earning minimum wage or more and credit toward graduation. One-half day is spent in school. The other half day, students are “earning while learning” in the private sector. Externship starting time varies depending on the individual student’s academic needs. An average of 10 work hours is needed each week.

Students gain on-the-job experience and training, develop independence, gain self-confidence and see the relationship between in-school learning and work requirements. This makes them better able to make career decisions.

**Corequisite:** Students must be enrolled in the capstone class (i.e. Voc. II class) of their CTE program.

**Prerequisite:** The student must have completed 50% of a CIP program (i.e. Voc. I class) in their 11<sup>th</sup> grade year. Minimum 2.0 GPA with teacher recommendation.

*\*\*\* Students enrolled in apprenticeship training may also receive paid work experience while accumulating on-the-job training hours necessary to complete the apprenticeship.*



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# English Department

## Course Offerings

2009/2010

### *Courses*

English I  
English II  
English II A  
English III  
English III A  
English IV  
AP English

### *Electives*

Creative Writing \*  
Journalism I\*  
Journalism II (Newspaper)  
Journalism III (Yearbook)  
Mysteries and Horror \*  
Mythology \*  
Real Life Literature \*  
Speech \*

*\* Indicates One Semester Course*



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# English Department

## Course Descriptions

**ENGLISH I - Course #4050/60 - 1 Year, Grade 9**



During a student's freshman year, his/her English education includes a study of grammar and usage, practice in writing and vocabulary development. In addition, the student is presented with a survey of several forms of literature including poetry, fiction, nonfiction, and drama. Emphasis is placed on the extension and the refinement of basic communication skills, both written and verbal, and on the acquisition of efficient study habits.

**ENGLISH II - Course #4131/41 - 1 Year, Grade 10**



The focus of this class is on different types of American literature. Students become better acquainted with fiction and drama through the works of some of America's greatest authors. Additionally, basic writing and vocabulary skills will be emphasized. The student will discover, develop and express ideas in an engaging, coherent style.

**ENGLISH II A - Course #4151/61 - 1 Year, Grade 10**



Writing selections from American literature, chosen from 1750 to modern day, will be covered in thematic units. A wide variety of literary types will be studied including sermons, essays, speeches, plays, short stories and novels. Organization, coherence and clarity in writing in response to the literature readings will be stressed throughout the year.

**ENGLISH III - Course #4191/4201 - 1 Year, Grades 11-12**



This class will focus on World Literature. Students will become acquainted with the works of the world's greatest authors. Students will explore drama, fiction, nonfiction, poetry, and the novel. Writing assignments will focus on organization, coherence, unity, clarity, and word choice.

**ENGLISH III A - Course #4211/21 - 1 Year, Grades 11-12**



Writing selections from World Literature will be covered. A wide variety of literary types and styles will be studied. Organization, coherence, and clarity in writing in response to the literature will be stressed.

**ENGLISH IV - Course #4241/51 - 1 Year, Grade 12**



This challenging class is for the college-bound senior. It is intended to prepare students for success in a college classroom. This class will focus on literary analysis of fiction written throughout history and across cultures. Students will use their knowledge of characterization, conflict and theme to analyze a variety of writing styles. Novels, short stories and plays will be covered. In addition to literary analysis, development of grammatical and writing skills will be a central part of the class.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# English Department

## Course Descriptions

### AP ENGLISH - Course #4291/4301 - 1 Year, Grade 12



The purpose of this course is to assist the senior honor student in preparing to take the Advanced Placement English Examination and for college English classes. The student will be exposed to poetry, drama, novels and given extensive experience in critical, analytical and practical writing for the AP Exam. Samples of exams from previous years will be furnished for practice exercises. It is strongly recommended that the student will have taken English III A prior to taking this class. **NO ADDS SECOND SEMESTER.**

### CREATIVE WRITING - Course #4320 - 1 Semester, Grades 11-12



Students will first begin the course by reading a wide variety of short stories, written in various genres and styles, in order to “wake up” their creative side and to help find their voice. Students will write and discuss their writing, along with the constructive critiquing of one another’s work. This course will have a strong emphasis on writing. Students will compile a large portfolio of work, including (but not limited to) short stories, poetry, drama, and creative nonfiction. This is not a grammar class, although attention to writing mechanics will be an essential part of our writing process.

### JOURNALISM I - Course #4210 - 1 Semester, Grades 10-12



Do you want to use your writing to reach a new and authentic audience? **Journalism I** is a course designed to teach the basics of journalistic writing, editing and interviewing. During this semester course you will learn how to shape your words, sentences, paragraphs and quotations into powerful stories designed for publication in newspapers and magazines. You will have a chance to write stories focusing on news, features, editorials, sports, reviews, and entertainment. Your stories may also be submitted for inclusion in WWT’s student newspaper, *The Legend*. Basics in specialized software such as Adobe InDesign (for layouts) and Adobe Photoshop (for pictures) will also be covered. Upon completion of this course, you will not only be a published journalist, you will also be eligible to continue earning elective credits by becoming a full time staff member on the newspaper (Journalism II) or yearbook (Journalism III) staff. *\*Available to Sophomores (with a teacher signature).*

### JOURNALISM II (Newspaper) - Course #4330/40 - 1 Year, Grades 11-12



The main task of the Journalism II class is to research, interview and write for the school newspaper, **The Legend**. Students are required to write stories, proofread, edit and obtain advertising for each monthly edition. Students will design and layout their article each month using PageMaker 7.0 and PhotoShop 6.0. This class may be repeated.

**Prerequisite:** Journalism I



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# English Department

## Course Descriptions

### JOURNALISM III (Yearbook) - Course #4350/60 - 1 Year, Grades 11-12



The Journalism III class is designed to provide students with the opportunity to develop stories, research and conduct interviews for the school yearbook. General knowledge of photography, journalistic writing and grammar are necessary. The student will sell, design and write advertising copy, organize, write, edit and publish the yearbook. This class may be repeated.

**Prerequisite:** Instructor permission required.

### MYSTERIES AND HORROR - Course #4234 - 1 Semester, Grades 11-12



Mysteries and Horror will explore the steps of inductive and deductive reasoning in order to solve a crime. The class will also explore the dark side of human nature and the consequences/realities associated with it. Short stories, novels, and films that fall into these categories will be examined.

### MYTHOLOGY - Course #4236 - 1 Semester, Grades 11-12



Classic Greek, Roman, and Norse myths and epics are read and discussed. These myths provide the foundation for much of today's modern literature. Modern urban legends and mythologies of other cultures may be included. Books may include *Mythology*, *The Iliad*, and *The Odyssey*. This is a reading intensive class that is supplemented with a variety of assignments and projects. The course is recommended primarily for the college bound student or those who show a strong interest in these ancient religions.

### REAL LIFE LITERATURE - Course #4235 - 1 Semester, Grades 11-12



"That is so crazy, I can't believe that really happened!" Have you ever said that after reading or hearing an amazing story? If you like discovering true stories that are more intense than fiction, **Real Life Literature** is the class for you! During this semester course you will travel across the Andes Mountains on a courageous trek for survival, witness a move from Afghanistan to America through the eyes of a teenage amputee, experience Rumspringa (the "running around" years) with Amish teenagers and much more... This class will utilize novels, documentaries, television series, movies, magazine articles, and biographies to span the globe in search of real-life adventures and true stories. You'll find yourself talking to your friends and family saying, "Let me tell you about this unbelievable story I just read..."



Arts & Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# English Department

## Course Descriptions

### **SPEECH - Course #4230 - 1 Semester, Grades 11-12**



Being able to communicate effectively is a necessary life skill. Sharpen your ability to deliver effective presentations and public speaking demonstrations by taking this semester course. You will have the opportunity to write and present several different types of speeches such as persuasive, expository, demonstration, analysis, informative and proposals to name a few. Varied forums for delivering speeches will be explored including voice threads, blogging, podcasts, debates, infomercials and traditional methods. Don't shy away from this chance to strengthen your writing and speaking skills at the same time!



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *Fine Arts Department*

## *SMJEC Arts & Communications*

### *Course Offerings*

#### *2009/2010*

### *Fine Arts Department*

Art Foundations  
 Art II  
 Commercial Illustration I & II  
 Drawing I & II  
 History of Art and Artists \*  
 Multicultural Crafts  
 from a Global Perspective I & II

Choir I - Concert Choir  
 Music Appreciation \*  
 Band  
 Guitar I & II \*

Drama \*  
 Advanced Drama\*  
 Fundamentals of Radio Broadcasting \*  
 WWT Staff (Radio) \*  
 TV Production  
 Advanced TV Production \*

*\* Indicates One Semester Course*

### *SMJEC Arts & Communication*

Visual Imaging/  
 Graphic Communications I

Visual Imaging/  
 Graphic Communications II



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Fine Arts Department

## Course Descriptions

### ART FOUNDATIONS - Course #3009 - 1 Semester



This is an introductory course that is designed to give students a strong foundation to build upon through the study of the basic elements and principles of design. Students will be required to creatively solve numerous two and three dimensional design problems using a variety of media, materials and equipment. Historical and aesthetic discussion will intersperse art production and evaluation. Students will have the opportunity to experiment with a wide variety of media and techniques and develop skills in the process.

Art Foundations is a prerequisite for all other art courses at the high school level. It must be taken and passed before students may take any other art classes. Once a student has earned credit for this class, it cannot be repeated. Art Foundations and Art II are separate classes. Each section is one semester, one-half credit.

### ART II - Course #3020 - 1 Semester



Art II involves the exploration of color, painting their own color wheel, warm and cool colors, complimentary colors and working on several paintings. Design is also explored as well as ceramics.

**Prerequisite:** Art Foundations

### COMMERCIAL ILLUSTRATION I & II - Course #3040/50 - 2 Semesters



The purpose of this course is the study of art as applied to the creation of selling of a product. Lettering techniques, layouts, logos, and the painting of furniture and other objects are worked on throughout the semester.

**Prerequisite:** Art Foundations

### DRAWING I & II - Course #3060/70 - 2 Semesters



Drawing techniques are studied more closely. Still life, perspective, landscapes and figure drawing are covered. Pastels, water color and scratch board are a few of the mediums used.

**Prerequisite:** Art Foundations

### HISTORY OF ART AND ARTISTS - Course #3093 - 1 Semester



This class will explore the life and work of artists past and present. Emphasis will be placed on becoming familiar with various styles of art and architecture. Students will participate in research activities and complete verbal and visual presentations pertaining to their studies. Each unit of study will include a hands-on activity related to the concepts learned in class.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Fine Arts Department

## Course Descriptions

### MULTICULTURAL CRAFTS FROM A GLOBAL PERSPECTIVE I & II - Course #3091/92 - 2 Semesters



This course will offer a unique hands-on experience creating diverse crafts from a variety of cultures both past and present. Students will examine the processes utilized to create traditional and modern crafts in two-dimensional and three-dimensional forms. Various mediums will include, but not be limited to clay, fibers, painting, and paper crafts.

**Prerequisite:** Art Foundations

### CHOIR I - Concert Choir - Course #3510/20 - 1 Year



This ensemble is open to any students wishing to learn more about the art of singing. Students will not only gain an appreciation for choral singing, but will also learn the fundamentals of music theory. Prior experience is not required.

Activities of this choir include participation in the Homecoming game, the Fall Revue Concert, the Holiday Celebration, the Spring Concert, and the MSVMA Choral Festival. Participation in Solo and Ensemble Festival is also an option for concert choir students.

### MUSIC APPRECIATION - Music: A Window to the World - Course #3570 - 1 Semester



A one-semester, elective, activity based class, designed to integrate one's love and curiosity of music. This course is designed to use student's favorite music and prior knowledge to understand the major components of music. Students will learn about the many influences of popular music throughout the world by learning music history, music theory, cultural music, and the art of listening to music. This class will impact the student by giving a better understanding of the impact of music on a person's life.

Activities in this class include listening to multiple music selections, learning how to notate music, composing simple music phrases with instruments and voice, watching cultural videos, and field trips to musical performances.

**Prerequisite:** A general understanding and curiosity of music in a person's life.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Fine Arts Department

## Course Descriptions

### **BAND - Symphony & Marching - Course #3580/3590 - 1 Year**



The concert bands serve as the marching band during the fall football season. The marching band is invited to perform at Labor Day parades, Richmond "Good Old Days", Warren Historical Parade, Columbus Day Parade, and a Thanksgiving parade. The band performs at all home football games and attends marching festival competitions when feasible.

The concert bands have several performances during the year: a Holiday Concert, a Spring Concert, Cabaret, MSBOA Band Festival, and the All-District Instrumental Festival in May. In addition, the bands are sometimes invited to perform at community functions and exchange concerts. Members should have a middle school background on their instrument to develop embouchure, tone, breath support, rhythm, style, intonation and technic.

Musical development is challenging and entails concentration and practice outside of class. The students develop an awareness of the opportunities available to use music as a creative outlet and avocation or a career if interested. Each student will explore his/her interests and talents and develop to the highest level of musicianship possible.

Educational travel has become a part of the high school program, and the band has performed at festivals in Toronto, Washington, D.C., Disney World, Virginia, New York, and Georgia. Students also have opportunities to participate in clinics and honors groups at area colleges as well as the opportunity to attend professional musical organization concerts in the area.

### **GUITAR I - Course #3595 - 1 Semester**



Students at all ability levels will learn how to read common music notation in order to perform in a flexible ensemble environment. Students will also experiment with basic music composition. Previous experience on an instrument is not required. Students will perform for each other in class and learn to evaluate others' performances. There may also be an opportunity to perform as an ensemble outside of class.

### **GUITAR II - Course #3596 - 1 Semester**



Guitar II is designed for students who have successfully completed Guitar I and would like to further their knowledge and performance skills. Advanced techniques to be covered in class include more complex rhythms, 2nd position, power chords, tablature, finger picking and improvising. There may also be an opportunity to perform as an ensemble outside of class.

**Prerequisite:** Guitar I or teacher's permission



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Fine Arts Department

## Course Descriptions

### DRAMA - Course #4231 - 1 Semester, Grades 9-12



This class is designed to increase the student's knowledge and appreciation of theater arts through hands-on introduction to basic acting skills and techniques, an exploration into the structure of a play, theater history, and play production, thus enhancing the student's ability to communicate effectively, and increasing self-esteem and confidence. Performance goals and theater language are learned by engaging in group and individual assignments.

### ADVANCED DRAMA - Course #4232 - 1 Semester, Grades 10-12



This class is designed for the serious theatre student. Skills already learned will be perfected such as pantomime and improvisation. More in-depth techniques, skills, and theatrical knowledge will be explored and experienced. Physical acting, vocal acting, advanced acting techniques, auditioning, playwriting and production, theatre roles and careers, theatre appreciation and evaluation, theatre history, directing, production, technical aspects of theatre, and study of classical plays and playwrights will be explored. Successful completion of Drama or recommendation of the instructor is required.

### FUNDAMENTALS OF RADIO BROADCASTING - Course #1015 - .5 Semester, Grades 10-12



This course covers the basic techniques of radio broadcasting intended for those students who want to learn how the business of broadcasting works. This one semester course is a prerequisite for the advanced WWT Radio Staff class. Topics covered include entry-level experience in Air Personality basics, newscasting, interviewing, promo writing, local news writing, critiquing radio shows, and current events broadcasting. Students learn about the newest technology in communications, especially computer systems used on the school district's radio station. This course is only offered first semester and it is a good place to start for those considering a career in the field of communications.

### WWT STAFF (RADIO) - Course #1016 - .5 Semester, Grades 10-12



Students may apply to be on the staff after taking Fundamentals of Radio Broadcasting. The WWT Radio Station Manager selects the WWT Radio Staff and enrollment is limited. Staff students are scheduled for one class hour per day at the radio station and must be available for additional time after school as required by the staff. The student will gain actual hands-on experience in many aspects of radio broadcasting while on the air on the school district's radio station.

*\*This course may be taken more than once for additional elective credit. \*\*Students must reapply and are not guaranteed re-enrollment.*

**Prerequisite:** Fundamentals of Radio Broadcasting



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Fine Arts Department

## Course Descriptions

### TV PRODUCTION - Course #1008/1010 - 1 Year, Grades 10-12



Students will learn how to work together as a television production crew, completing various phases of production, and taking and giving directions in order to produce videos. The course content includes drawing storyboards, writing scripts, operating cameras, and working with other audio and video components. Students may need to work on both sides of the camera to complete assignments. **Outstanding attendance and ability to work cooperatively and productively are major requirements for this course.**

### ADVANCED TV PRODUCTION - Course #1020/21 - 1 Semester, Grades 10-12



A one-semester, elective, for students who have already passed a semester of TV Production. This class will build upon what the students have previously learned in the TV Production class.

**Prerequisite:** Must pass a semester of TV Production with at least a “C”; must be proficient in the studio; must have a full understanding of the pre-production process, production process, post-production; and have a depth of knowledge about the following aspects of TV Production: filming and the use of a camera, digital editing, audio mixing and recording, and lighting in studio and on location.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Fine Arts Department

## Course Descriptions

### SMJEC - Arts & Communication

#### Course Descriptions

**VISUAL IMAGING/GRAPHIC COMMUNICATIONS I - Course #6863/64**  
**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course covers skills required for success in Visual Imaging and Graphic Arts, part of the Arts and Communications Pathway. The main areas of focus are prepress functions or graphic design, lithography, and screen-printing. Students will learn the theory behind all the different printing processes, as well as experience hands on projects applying the theories. Further emphasis will also be placed on graphic design principles through the application of Adobe Creative Suite 3, which includes InDesign CS3, Photoshop CS3, and Illustrator CS3.

**VISUAL IMAGING/GRAPHIC COMMUNICATIONS II - Course #6865/66**  
**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grade 12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course continues the development of skills covered in Visual Imaging I. The areas of focus are advanced prepress functions or graphic design, multi-color lithography, and multi-color screen printing. Further emphasis will be placed on graphic design principles through the application of Adobe Creative Suite 3. Importance will be placed on how a student's skills could be used in the real world work place through the study of job flow management. Students will master printing and finishing of their projects.

**Prerequisite:** Passed Visual Imaging/Graphic Communications I with a "C" average or better.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Foreign Language Department

## Course Offerings

2009/2010

French I

French II

French III A

French IV A

Mandarin Chinese I

Mandarin Chinese II

Spanish I

Spanish II

Spanish III A

Spanish AP



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *Foreign Language Department*

## *Course Descriptions*

**FRENCH:** Four years of the French language are offered. Each year integrates the four skills of speaking, reading, writing and oral comprehension. Lots of audiovisual materials are used in the classroom with cassette and video tapes, slides, laser discs, computers and CD-ROM. Students can listen to native speakers from many different French speaking countries. Pop songs and other various musical selections accelerate the learning process through vocabulary and pronunciation. Culture is an integral part of each year and is taught daily through slides. Francophone penpals and “key-pals” through the Internet are made available to the French students. Every year, students at all levels are encouraged to compete with other students throughout the U.S. in The National French Contest.

### **FRENCH I - Course #6010/20 - 1 Year**



Students begin communicating in the French language from day one with lots of oral exercises to train their ears. At the end of one full year students can expect to speak, understand, read and write in the present and past constructions. There are several projects and activities that involve an in-depth study of French culture and geography.

### **FRENCH II - Course #6030/40 - 1 Year**



Students are using more and more French in the classroom. Additional verb tenses and vocabulary expand their communication to a variety of situations. French music and movies reinforce listening skills. Audiovisual materials and dialogues increase. Oral proficiency is stressed.

### **FRENCH III A - Course #6050/60 - 1 Year**

### **FRENCH IV A - Course #6070/80 - 1 Year**



The advanced French classes receive honors credit. Students concentrate on speaking skills. All verb tenses are reviewed and reinforced. Many oral projects (French artists, musicians, cartoons, food, culture, etc.) stimulate learning. Field trips to museums, the theatre, French restaurants, etc. take place at this level with a trip to France often occurring over Spring break.

### **MANDARIN CHINESE I - Course #6163/64 - 1 Year**



**Purpose:** To engage students in the development of listening, speaking, reading, writing of Mandarin, a critical world language for the 21st Century. Students will learn to use the Mandarin language to communicate. Focus will be on oral communications. They will learn the cultural and social aspects of China through the study of the Mandarin language, the official language of China, since language is the primary vehicle for expressing cultural perspectives and participating in social practices. Students have the opportunity to earn .5 language credit through a summer travel experience to China.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Foreign Language Department

## Course Descriptions

### MANDARIN CHINESE II - Course #6165/66 - 1 Year



**Purpose:** To continue the study of Mandarin, a critical world language and the official language of China. Students will use the language in oral and written form, to communicate orally and in writing including electronic communications, present reports, retell stories, etc. More focus will be placed on written communications. Cultural and social study of China continues and the opportunity to earn .5 language credit through the summer travel experience to China continues to be an option.

### SPANISH I - Course #6090/6100 - 1 Year



**Objectives:** To give the student a basic knowledge of Spanish phonetics; a basic working vocabulary; a basic knowledge of and ability to work with elementary grammar and sentence structure; an ability to understand the spoken and written language within an increasingly expanded context; a general knowledge of Hispanic history, geography, and culture; and an ability to communicate in the language from the first day of the class.

**Implementation:** Above objectives are achieved through use of the language as much as possible in the classroom for instructional and conversational purposes; listening to and repeating correct pronunciation and structure modeled by the teacher and tapes and videos featuring native speakers; spontaneous student/teacher, and student/student question and answer sessions and dialogues; prepared student dialogues and/or speeches; written and oral textbook and workbook exercises to reinforce vocabulary, grammar, structure, and spelling; textbook readings that establish situations that the student can identify with and expand to his/her own life thereby allowing discussion of meaningful topics; textbook readings that introduce elements of Hispanic life and culture; and projects and activities - magazines, movies, making books, calendars, Christmas decorations, bulletin boards.

### SPANISH II - Course #6110/20 - 1 Year



**Objectives:** To complete the student's introduction, as far as possible, to grammar - mostly verb usage; to continue to expand vocabulary and ability to understand and to communicate in the language; and to expose students to reading material outside the textbook.

**Implementation:** The same as Spanish I with the addition of supplementary reading.

### SPANISH III A - Course #6130/40 - 1 Year



**Objectives:** To continue to expand and refine the student's capability with the written and spoken word and to study in greater depth the history and literature of Spanish speaking peoples.

**Implementation:** The same as Spanish I and II. In addition, the student, through the text and supplementary materials, will begin to read in a more analytical manner. He/she will begin to discuss orally and in written form the ideas expressed in literary works. Students will also begin to express their own ideas about the world they live in, its happenings, and values.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Foreign Language Department

## Course Descriptions

### SPANISH AP - Course #6161/62 - 1 Year



Spanish ap allows students to further their study of Spanish grammar and literature. It is intended for those students who wish to become proficient in all four language skills: listening, speaking, reading, and writing. There will be increased study of Spanish literature and awareness of the achievements of the Hispanic people through their art and architecture. Extensive work will be done in the organization and writing of compositions and oral communications. This is a college level course and will be taught as such. Students will be required to access authentic material outside of class as well as perform in a manner equivalent to a college level Spanish class. Students will have the opportunity to take the national advanced placement exam in Spanish with the possibility of earning college credit.

**Prerequisite:** Passed Spanish III with a “B” average or better



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# SMJEC Health Sciences

## Course Offerings

2009/2010

Dental Assistant

Emergency Medical Services

Health Information Services

Medical Office Administrative Assistant

Nursing

Pharmacy Technician

Health Science Externship



Arts &  
Communication



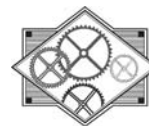
Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *S M J E C - Health Sciences*

**DENTAL ASSISTANT - Course #6777/78**  
**(SMTEC: LHS) – 1.5 credit, 2-3 semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course prepares students for employment as a Dental Assistant. This program is also highly recommended for students who may be pursuing a career as a dentist, dental assistant, dental hygienist, and a dental lab tech. The Dental Assisting program prepares students to provide patient care, take dental radiographs (x-rays), prepares patients and equipment for dental procedures, and discharges office administrative functions under the supervision of dentists and/or dental hygienists. Instruction includes medical record keeping, general office duties, reception and patient intake, scheduling, equipment maintenance and sterilization, basic radiography, pre- and post-operative patient care and instruction, chair side assisting, taking tooth and mouth impressions, and supervised practice.

**EMERGENCY MEDICAL SERVICES - Course #6737/38**  
**(SMTEC: CLHS) - 1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This class is designed for students seriously interested in medicine – specifically emergency medicine. Students enrolled in this program will receive instruction in the fields of pre-hospital and emergency medical training. This program is an intense study of the human body and the treatment required outside the hospital setting. Students will receive intensive hands-on instruction in anatomy and physiology, emergency first aid, bleeding control, shock, cardiac arrest management, airway management, and patient treatment at accident scenes. Classroom study and hands-on practicals will challenge the student both academically and physically. Upon successful completion of the program through written, practical, and clinical performance objectives established by the Michigan Department of Consumer & Industry Services, students will be able to take the EMT-Basic state-licensing exam to become an Emergency Medical Technician (EMT). Students will be required to do clinical training in a hospital emergency room and an ambulance service.

**Prerequisite:** “C+” overall GPA with a “B” average or better in Biology is recommended



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Health Sciences*

## *Course Descriptions*

**HEALTH INFORMATION SERVICES - Course #6793/94**  
**(SMTEC: WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Health Science Information Service is an overview of the Health Unit Coordinator (HUC) position at an acute care facility. The class will discuss all aspects of clerical duties involved with the position. Health Educator principles are taught. Students have the opportunity to present various teaching units to other students in the consortium.

HUC students who meet the criteria may elect to do a clinical rotation at an acute care facility. The students may be eligible for the National Certification Exam for NAHUC.

CPR/First Aid, MIOSHA Safety Curriculum and the Health Science Core are taught. Heavy concentration on medical terminology, anatomy and physiology are part of the curriculum.

Employability skills are promoted. Upon successful completion of this course the student may be eligible for externship their senior year in various health care facilities. Students will be able to participate and join in the professional student organization HOSA (Health Occupations Students of America).

**General Qualifications:** Students must have good communication skills, be adaptable to change, and be able to apply problem-solving techniques. A **good** attendance record with responsible and mature conduct is required. The student must like working with people.

**MEDICAL OFFICE ADMINISTRATIVE ASSISTANT- Course #6795/96**  
**(SMTEC: WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Health Science Medical Office Administrative Assistant prepares the student to support physicians by providing assistance in an office or clinical setting. Medical clinical and office procedures are taught. Heavy concentration on anatomy and physiology with medical terminology are part of the curriculum. CPR/First, MIOSHA Safety Curriculum and the Health Science Core are taught.

Employability skills are promoted. Upon successful completion of this course the student may be eligible for externship their senior year in various health care facilities. Students will be able to participate and join in the professional student organization HOSA (Health Occupations Students of America).

**General Qualifications:** Students must have good communication skills, be adaptable to change, and be able to apply problem-solving techniques. A **good** attendance record with responsible and mature conduct is required. The student must like working with people.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# S M J E C - Health Sciences

## Course Descriptions

**NURSING - Course #6791/92**  
**(SMTEC: WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Health Science Nursing is a comprehensive study of the health care delivery system. The program includes all aspects of patient care from newborn to geriatrics. Human anatomy and physiology with concentration in nursing applications are included. Medical terminology and language are introduced. MIOSHA Safety Certification, Red Cross CPR/First Aid is offered.

Upon successful completion of this course the student may be eligible for externship their senior year in various health care facilities. Job shadow opportunities are part of the curriculum. Students will be able to participate and join in the professional student organization HOSA (Health Occupations Students of America).

**General Qualifications:** Students must have good communication skills, be adaptable to change, and be able to apply problem-solving techniques. A **good** attendance record with responsible and mature conduct is required. The student must like working with people.

**PHARMACY TECHNICIAN - Course #6749/50**  
**(SMTEC: FHS) - 1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Completion of this course is geared toward a student becoming a Certified Pharmacy Technician (CPhT). A pharmacy technician is a person who works under the direct supervision of a licensed pharmacist and performs many pharmacy-related functions. Pharmacy technicians are used in a wide variety of practice settings, including community pharmacies, hospitals, the military, in home health care, long term care, mail service facilities, managed health care facilities, and educational/training programs. Pharmacy technicians are individuals working in a pharmacy, who under the supervision of a licensed pharmacist, assist in pharmacy activities not requiring the professional judgment of a pharmacist. The pharmacy technician is accountable to the supervising pharmacist, who is legally responsible by virtue of state licensure for the care and safety of patients served by the pharmacy. Students will have an opportunity to complete a non-paid clinical work-based learning experience in a pharmacy. Upon successful completion of this course and earning a high school diploma, the student may take the national exam offered by the Pharmacy Technician Certification Board.

**Prerequisite:** Successful Completion of Algebra I and Biology I

**Suggested Prerequisite:** Chemistry

**HEALTH SCIENCE EXTERNSHIP - Course #6789/90**  
**(SMTEC: WWT) - 1.5-2 Credits, 2-3 Semesters, Grade 12**



Students who are in affiliated Health Science classes may elect to interview for externship placement during their senior year. Clinical settings vary from veterinary hospitals, dental offices, St. John Macomb Hospital, St. John Oakland Hospital, and medical/doctor's offices. An average of 10 work hours is needed each week.

**Corequisite:** Students must be enrolled in the capstone class (i.e. Voc. II Class) of their CTE program.

**Prerequisite:** The student must have completed 50% of a CIP program (i.e. Voc. I class) in their 11th grade year.

Minimum 2.0 GPA with **instructor recommendation and a successful interview is required.**



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *SMJEC Human Services*

## *Course Offerings*

*2009/2010*

### *Human Services*

Cosmetology I \*\*\*\*

Cosmetology II \*\*\*\*

Law Enforcement \*\*

### *Family and Consumer Sciences*

Balancing Work and Family \*

Consumer Education \*

Essential Health and Living Skills \*

Family Living \*

Nutrition Education/Advanced Food for Fitness\*

Nutrition Education/Foods for Fitness \*

Parenting \*

Personal Living \*

*\* Indicates One Semester Course*

*\*\* Indicates a Two Credit Course*

*\*\*\*\* Indicates a Four Credit Course*



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# S M J & C - Human Services

## Course Descriptions

**COSMETOLOGY I - Course #6857/58**  
**(SMTEC: WWT) - 4 Credits, 2-3 Semesters, Grades 11**  
**Meets VPAA One (1) Credit Graduation Requirement**



Cosmetology is a State certified program that covers 2 years of comprehensive and involved instruction. The curriculum is set up by the Michigan State Licensing Board of Cosmetology and covers all areas of cosmetology, theory and skill training. Upon completion of this course of instruction, the student is eligible to take the State Cosmetology examination for licensing (must be 17 years old). Once the student is licensed, they will be able to work in an established salon in the State of Michigan.

The Cosmetology program covers a two-year period and requires the completion of 1500 clock hours of training. During the regular school year, students will attend 3.5 hours per day, Monday through Friday in the afternoon from 2:00 to 5:30 p.m.

**Students will be required to spend an additional nineteen (19) days before the school year begins and nine (9) days after the school year ends. This is required in the junior and senior year to complete the required 1500 clock hours of training in the two-year program. Summer dates/times are subject to change due to district calendar issues and will be determined on a year-to-year basis by the end of the current school year.**

**COSMETOLOGY II - Course #6859/60**  
**(SMTEC: WWT) - 4 Credits, 2-3 Semesters, Grade 12**  
**Meets VPAA One (1) Credit Graduation Requirement**



Cosmetology II is the second year of the two-year Cosmetology program.

**Prerequisite:** Successful completion of Cosmetology I.

**LAW ENFORCEMENT - Course #6951/52**  
**(SMTEC: CLHS) - 1.5 Credits, 2-3 Semesters, Grades 11-12**  
**Meets VPAA One (1) Credit Graduation Requirement**



This course introduces students to the broad range of careers in police work and law enforcement. A wide range of procedures associated with law enforcement and public safety will be reviewed. Various hands-on activities will be experienced such as finger printing, handcuffing procedures, traffic stops, crime scene evidence collection, etc., along with many other law enforcement techniques. Students will acquire the skills and behaviors associated with law enforcement and public safety. Partnerships with our local law enforcement, courts, and police agencies will support interactions in many areas of the program.

**Prerequisite:** Personal interview by instructor with an overall grade point average of "C" or better.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *S M J E C - Human Services*

## *Course Descriptions*

### *Family and Consumer Sciences*

The Family and Consumer Sciences program consists of a group of one semester instructional courses preparing males and females for the multiple roles of homemakers and wage earners. We emphasize the acquisition of knowledge and skills relevant to strengthening home environments and the quality of individual and family life.

**BALANCING WORK AND FAMILY - Course #6901**  
**(SMTEC: LHS) - .5 Credit, 1 Semester, Grades 10-12**



This course is designed to help students understand how to survive in today's changing world. We look at the workforce in which they will participate, the families in which they will grow, and the communities in which they will live. They will learn that work, family, and community **are not** separate worlds, but connect to help a person live and grow, and contribute to society.

**CONSUMER EDUCATION - Course #6902**  
**(SMTEC: WWT) - .5 Credit, 1 Semester, Grades 9-12**



The content of this course helps students to develop skills in examining their consumer behavior, managing finances, becoming an informed consumer, purchasing basic necessities, purchasing big ticket items, purchasing service and examining their role in the market place. Hands-on projects help to reinforce the key concepts of this course.

**ESSENTIAL HEALTH AND LIVING SKILLS- Course #6903**  
**(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 9-11**



In accordance with the Michigan Health Model, this course focuses on health, wellness, personal fitness, mental health and disorders, problem solving, decision-making, stress, anger prevention, diet, weight control, and the use and abuse of drugs, alcohol, and tobacco. This course will also focus on the male and female reproductive system, abstinence, birth control, communicable and sexually transmitted diseases. Additional programs used in the curriculum are MCAP, T.E.A.M., and the Macomb County Health Department.

**FAMILY LIVING - Course #6906**  
**(SMTEC: CLHS, WWT) - .5 Credit, 1 Semester, Grades 11-12**



Family Living emphasizes practice and development skills to expand communication techniques, prepare for different needs in each of the life cycle stages, deal with diverse modes of life, coordinate work and family life, and develop the ability to recognize and/or cope with problems such as abuse, divorce, remarriage, aged family members and death.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



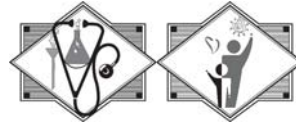
Human Services



Natural Resources & Agriscience

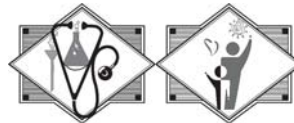
# S M J & C - Human Services

**NUTRITION EDUCATION/ADVANCED FOOD FOR FITNESS- Course #6908**  
**(SMTEC: LHS) - .5 Credit, 1 Semester, Grades 9-12**



Advanced Nutrition Education is a one-semester comprehensive Family and Consumer Science course designed for high school students who have achieved the level of outcomes covered in Nutrition Education. The curriculum for this course stresses nutritional science principles important for living a healthier life. Food availability, food technology, time, behavior, and personality are studied to see how they affect food selection and life style choices. Students will also examine fitness goals, food from around the world, and etiquette. This is a non-cooking course.

**NUTRITION EDUCATION/FOODS FOR FITNESS - Course #6910**  
**(SMTEC: CLHS, LHS) - .5 Credit, 1 Semester, Grades 9-12**



This course is designed for a high school student to examine the complexity of their environment with relationship to making choices about diet and nutrition. The interrelationship of food to an individual's energy supply, fitness and wellness, as well as overall health will be explored. This course also emphasizes safe and nutritious preparation of snacks and meals.

**PARENTING - Course #6912**  
**(SMTEC: CLHS, LHS, WWT) - .5 Credit, 1 Semester, Grades 11-12**



Parent/Child Development is designed to address personal awareness, knowledge and skills associated with parenting roles and responsibilities. The program expands on the process of being a parent through practical experiences, particularly simulation and child interaction. This course helps to develop the necessary knowledge, which encourages children's physical, intellectual, social, and emotional development. Furthermore, the course includes the study of current and critical issues important to raising healthy children with positive parent-child relationships.

**PERSONAL LIVING - Course #6913**  
**(SMTEC: CLHS, LHS, WWT) - .5 Credit, 1 Semester, Grades 11-12**



In this course, emphasis is placed on the individual and his/her relationship with others, the community and their future career. Students will gain skills to assist them in assessing their own self-balance, personality, self-concept, decision-making skills, interpersonal relationships, communication skills, conflict resolution, and career awareness and goals.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Mathematics Department

## Course Offerings

2009/2010

Algebra I  
Geometry  
Algebra II  
Extended Algebra II (1st Year)  
Extended Algebra II (2nd Year)  
Precalculus

Geometry A  
Algebra II A  
Precalculus A  
AP Calculus

Probability and Statistics \*

Programming I \*  
Programming II \*  
Web Design I \*  
Web Design II \*

*\* Indicates One Semester Course*



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Mathematics Department

## Course Descriptions

The Mathematics Department offers two different sequences for students to take in order to fulfill the four (4) credit mathematics graduation requirement. The sequence that a student chooses depends on his/her math ability and career technical goals.

The regular sequence is for the student of average ability who may or may not plan on entering college. This program will give him/her a good balanced background in math to prepare for the college level and/or technical training.

The honors sequence is designed for students with above average ability in math.

### *Regular Sequence*

- Algebra I
- Geometry
- Algebra II
- Extended Algebra II (1st Year)
- Extended Algebra II (2nd Year)
- Precalculus

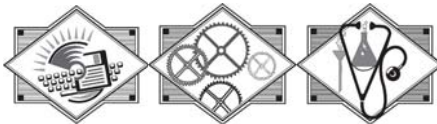
### *Honors Sequence*

- Geometry A
- Algebra II A
- Precalculus A
- Math Elective or AP Calculus

### *Electives*

- Probability and Statistics I\*
- Probability and Statistics II\*
- Programming I \*
- Programming II \*
- Web Design I \*
- Web Design II \*

#### **ALGEBRA I - Course #7170/7180 - 1 Year**



A modern course in algebra for students who are considering college. Topics include first degree equations, verbal problems, polynomial operations, factoring, fractional expressions and quadratics.

#### **GEOMETRY - Course #7190/7200 - 1 Year**



A course in plane and solid geometry to acquaint students with the structure of geometry and the design of a formal proof. Topics include proofs, polygons, planes, inequalities, ratio, geometry of the circle and right triangles and volume. This course requires a good background in Algebra I.

#### **ALGEBRA II - Course #7210/7220 - 1 Year**



An extension of the Algebra I course. Topics include functions, fractional expressions, quadratics, systems of linear equations, proportion and variations, exponents, radicals, complex numbers, determinants and the binomial theorem.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Mathematics Department

## Course Descriptions

### EXTENDED ALGEBRA II (1st Year) - Course #7221/7222 - 1 Year



An extension of the Algebra I course which incorporates the first semester curriculum of Algebra II extended over one year. Topics include functions, fractional expressions, quadratics, systems of linear equations, proportion and variations, exponents, radicals, complex numbers, determinants and the binomial theorem.

Prerequisite: Teacher Recommendation

### EXTENDED ALGEBRA II (2nd Year) - Course #7223/7224 - 1 Year



An extension of the Algebra I course which incorporates the second semester curriculum of Algebra II extended over one year. Topics include functions, fractional expressions, quadratics, systems of linear equations, proportion and variations, exponents, radicals, complex numbers, determinants and the binomial theorem.

Prerequisite: Teacher Recommendation

### PRECALCULUS - Course #7233/34 - 1 Year



This is a two part course divided with one semester of trigonometry and one of advanced algebra. Topics include advanced algebra, trigonometry and geometry, statistics, analytic geometry and an introduction to calculus.

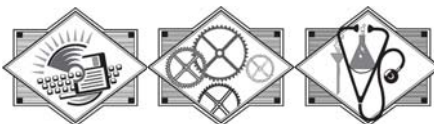
Prerequisite: Algebra I, Algebra II, and Geometry

### GEOMETRY A - Course #7290/7300 - 1 Year



A course for the exceptional student dealing with many of the same topics as regular geometry except in more depth.

### ALGEBRA II A - Course #7270/80 - 1 Year



A continuation of Algebra I A with trigonometry integrated into the course. Topics include the real number system, rational expressions, complex numbers, exponential and logarithmic functions, conic sections, circular functions and binomial theorem and systems of equations.



Arts & Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Mathematics Department

## Course Descriptions

### PRECALCULUS A - Course #7235/36 - 1 Year



This course is intended to give the college bound student a background in various areas of advanced mathematics. Topics include foundations of mathematics, review of algebra, equations, inequalities, functions, analytic geometry and introduction to calculus.

### AP CALCULUS - Course #7324/25 - 1 Year



Advanced Placement Calculus (Calculus AB) is a challenging course that is meant to be the equivalent of a college Calculus I course and can earn students college credit. The purpose of this course is to prepare students for the Advanced Placement Calculus AB examination and for college-level courses. This full-year course is based on three major concepts of calculus: limits, derivatives and their applications, and integrals and their applications.

### PROBABILITY AND STATISTICS I - Course #7323 - 1 Semester, Grades 11-12



This course is an integration of mathematics and science. The activities completed during this one semester course will allow students to collect, sort, organize, represent, and analyze data. This course is designed to make students wise consumers of information and “prepared” citizens in the age of technology and mass communication.

### PROBABILITY AND STATISTICS II - Course #7326 - 1 Semester, Grades 11-12



This course is a continuation of Probability and Statistics I. The topics covered during this semester will go much beyond the introductory concepts from the first course. This course is designed for students in either the vocational education or college bound curriculum. Such concepts as confidence intervals, hypothesis testing, correlation, and regression will challenge students to become stronger mathematical thinkers.

**Prerequisite:** “C” or better in Probability and Statistics I

### PROGRAMMING I USING VISUAL BASIC - Course #7353 - 1 Semester



This one semester course is an introduction to computer science and programming. Students will use the language Visual Basic to create professional looking windows based applications. Topics include: variables, calculations and data, decision making, and loops.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Mathematics Department

## Course Descriptions

### PROGRAMMING II USING C++ - Course #7354 - 1 Semester



This one semester course is an introduction to computer science and programming. Students will use the programming language C++. Topics include: foundations of computers and programming, use of variables and constants, math operators, strings and screen I/O, decision making in programs, and loops.

### WEB DESIGN I - Course #7355 - 1 Semester



This course will focus on the development of web pages and graphics. Students will learn HTML, the basics of web design. Also, students will be introduced to web graphics using programs like Flash and Fireworks. This class is project-based with many hands-on activities.

### WEB DESIGN II - Course #7356 - 1 Semester



This course is a continuation of Web Design I. Students will continue to learn the program Flash and will be introduced to another graphics program, Photoshop. This class is project-based with many hands-on activities.



Arts & Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Physical Education

## Course Offerings

2009/2010

Health \*  
Swimming \*  
Swim/Health (9th & 10th Graders Only) \*

Basic Physical Education \*

Advanced Sport Technique \*

Exercise Through Dance \*

Leisure Time Sports \*

Personal Fitness \*

Team Sports \*

Weight Training \*

*\* Indicates One Semester Course*

Athletes may have the option to take Advanced Sport Technique as an elective before Physical Education (the requirement). In order to do this, the student-athlete **must** get permission from their coach, counselor, **and/or** physical education teacher. Advanced Sport Technique does not fulfill the physical education requirement, it is an elective class. All students are required to take Physical Education class to fulfill graduation requirements.



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *Physical Education*

## *Course Description*

### *Required Classes*

Students are required to take one semester of Physical Education, one semester of Health Education, and one semester of Swimming. The requirements will be started in the 9th grade.

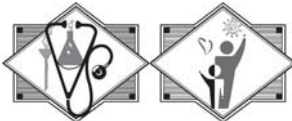
**Starting with the class of 2011, Physical Education must be taken and successfully completed before taking any other gym elective.**

#### **HEALTH - Course #8020 - 1 Semester**



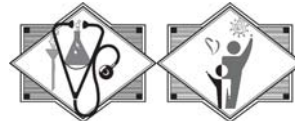
The course deals with selected topics which may include personal hygiene, communicable diseases, first aid, CPR, general anatomy, substance abuse (alcohol, drug use and abuse, tobacco), human sexuality (AIDS and STD), community health resources, nutrition, and mental health. The course will attempt, through class discussion, movies, pamphlets, and guest speakers, to prepare the student to become a better educated teenager and more informed adult.

#### **SWIMMING - Course #8040 - 1 Semester**



The objective of this course is to teach the student basic swimming strokes, self-survival, personal safety skills and elementary forms of rescue. Upon completion of the course, a student may qualify for a Red Cross Level I, II, III, IV, or V Swim Card; however, this would not be required for passing the class.

#### **SWIM/HEALTH (9th & 10th GRADES ONLY) - Course #8060 - 1 Semester**



This is a comprehensive health and basic swim class. In the health segment of the course, topics include communicable diseases, general anatomy, substance abuse (alcohol, drug use/abuse, tobacco), human sexuality (AIDS/STD), community health resources, nutrition, mental/emotional health. The course will utilize a variety of learning styles to ensure the students will become better educated and more informed, health literate adults. In the swimming segment, students will learn basic swimming strokes, self-survival, personal safety skills, and elementary forms of rescue. Upon completion of this part of the course, students have an option to qualify for a certified Red Cross level I, II, III, IV, V swim card.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



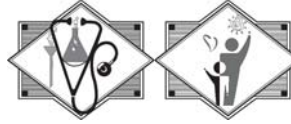
Natural Resources & Agriscience

# Physical Education

## Course Description

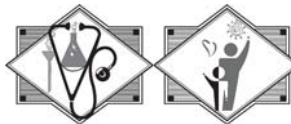
### Physical Education Classes

#### BASIC PHYSICAL EDUCATION - Course #8030 - 1 Semester



This is a co-ed class to be taken to meet the basic requirement for physical education. The co-ed activities may include tennis, basketball, badminton, golf, square dancing, softball, volleyball, and other physical fitness activities.

#### ADVANCED SPORT TECHNIQUE - Course #8010 - 1 Semester

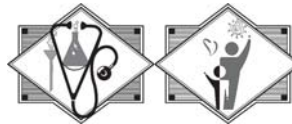


This class is designed for students with the desire to improve themselves both in the weight room and on the athletic field. The class will involve weight training, speed and agility training, and plyometrics. The class is designed to improve oneself in sports that require strength and quickness.

Students participating in fall sports are recommended to take this class second semester. Students participating in winter and/or spring sports are recommended to take this class first semester.

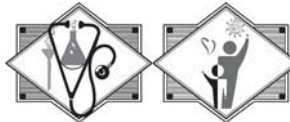
**Prerequisite:** Students must be competing at the varsity level during the current semester or will be competing at the varsity level the following semester. Written consent from a Varsity coach may be required for entry into class.

#### EXERCISE THROUGH DANCE - Course #8092 - 1 Semester



This course is a physical education class where students have the opportunity to explore fitness through learning and applying basic dance aerobic and rhythmic movement sequences. A sample of various dance techniques will be introduced: hip-hop, step, jazz, modern dance, cultural dance, swing dance, and many others.

#### LEISURE TIME SPORTS - Course #8100 - 1 Semester



This course focuses on predominately individual sports that students can carry into the future. These activities include Tennis, Golf, Badminton, Bowling, and Personal Fitness.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



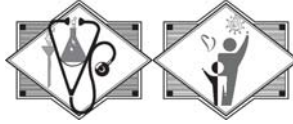
Natural Resources & Agriscience

# Physical Education

## Course Description

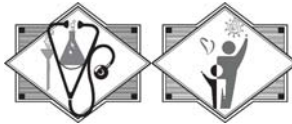
### Physical Education Classes

#### PERSONAL FITNESS - Course #8131 - 1 Semester



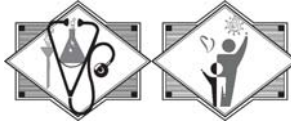
This class will offer a variety of activities associated with general aerobics and overall fitness. Those activities include step aerobics, aerobic dance, Tai-Bo (a combination of Tai-Chi Martial Art and Boxing). Students will also demonstrate the ability to lead an aerobic routine. In addition, students will be involved in weight training and running as part of their personal conditioning.

#### TEAM SPORTS - Course #8071 - 1 Semester



This is a high intensity course which may include units in sports including touch football, floor hockey, team handball, soccer, basketball, volleyball, softball, ultimate frisbee.

#### WEIGHT TRAINING - Course #8120 - 1 Semester



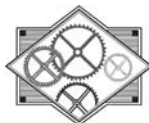
This course includes work with the Universal Weight machine, barbells, a good running program and physical fitness activities. Students will be periodically tested on their progress at the various weight stations, running abilities, and improvements in aerobic conditioning.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Science Department

## Course Offerings

2009/2010

Introduction to Physics  
Introduction to Physics A

Biology  
Biology A  
AP Biology

Chemistry  
Chemistry I A  
AP Chemistry

Conceptual Physics \*  
Physics  
Physics A

Environmental Science \*  
Forensic Science \*  
Genetics \*

**\* Indicates One Semester Course**



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Science Department

## Course Description

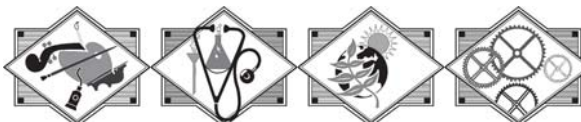
In Order to graduate from Warren Woods Tower High School, a student must have successfully completed three years of science. (The first year must be science essentials, the second year must be biology, and the third year must either be chemistry or physics.

The science department has **two different sequences** that students may take depending on their ability and career goals. The **regular sequence** is for the student of average ability who may or may not plan to continue on to college. These courses will give the student a broad basis for most career endeavors. The **honors sequence** is for the above average student and for those who plan on a career in a science related field.

Although there is only a three-year science requirement, the science department offers a comprehensive elective program with three advanced courses.

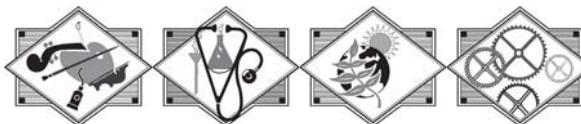
<p><b><i>Regular Sequence</i></b></p> <p>Introduction to Physics Biology Physics or Chemistry</p> <p><b><i>Honors Sequence</i></b></p> <p>Introduction to Physics A Biology A Chemistry I A or Physics A</p>	<p><b><i>Electives</i></b></p> <p>Conceptual Physics AP Biology AP Chemistry Environmental Science Forensic Science Genetics</p>
--	--

### INTRODUCTION TO PHYSICS - Course #9045/46 - 1 Year



This course provides a fundamental understanding of the essentials of physics and chemistry. Topics such as motion, electricity, sound and energy are covered in the physics section of the class. The chemistry portion of the class covers atomic structure, chemical reactions, and properties and changes in matter.

### INTRODUCTION TO PHYSICS A - Course #9047/48 - 1 Year



This course is designed for the college-bound student interested specifically in a field of science for further study such as chemistry, physics, biology, medicine, engineering, etc. This course will provide an in depth study of physics and chemistry. This class is theoretically and mathematically oriented.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Science Department

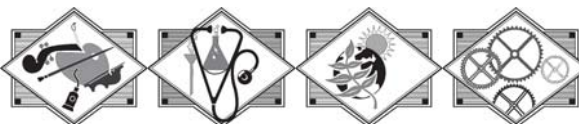
## Course Description

### BIOLOGY - Course #9030/40 - 1 Year



This class is designed to meet the needs of students who are reading at grade level. This class provides a fundamental program in biology for all students. It is intended to meet the needs of those students in a college preparatory tract as well as students in a general education program.

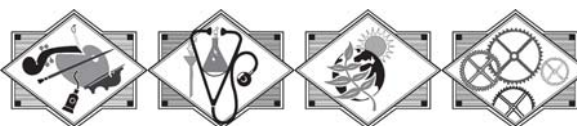
### BIOLOGY A - Course #9050/60 - 1 Year



This is a laboratory oriented biology course designed for the college-bound student who has a high science ability and is above average in both academic proficiency and maturity. This program is more theoretical in nature, placing great emphasis on the investigative process of science and history of scientific ideas.

Prerequisite: Teacher Approval

### AP BIOLOGY - Course #9274/75 - 1 Year



This lab based course follows the curriculum set forth by the AP Central College Board. Study is focused on molecules, cells, heredity, evolution, organisms and populations. This course will help students develop a conceptual framework for modern biology and an appreciation of science as a process. The major themes of this course include: Science as a Process, Evolution, Energy Transfer, Continuity and Change, Relationship of Structure to Function, Regulation, Interdependence in Nature, and Science, Technology, and Society. Some labs may need to be completed outside of normal class time.

This course is strongly recommended for students interested in advanced class work or careers in the field of science. At the end of this course, the students are encouraged to take the Advance Placement Biology Exam to obtain college credit.

### CHEMISTRY - Course #9150/60 - 1 Year



Chemistry is a survey of the traditional chemistry topics both inorganic or organic. It is designed to be a practical chemistry, relevant to the student who desires an additional year of science but lacks the necessary mathematical and scientific background needed to succeed in the Chemistry I A course. Students who are interested in careers in the areas of agriculture, nursing, home economics, veterinary medicine, human medicine, dentistry, pharmacy, biology, chemistry, physics, and engineering are strongly advised to take this course.

**Prerequisite:** One year of Biology and one year of Algebra.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services

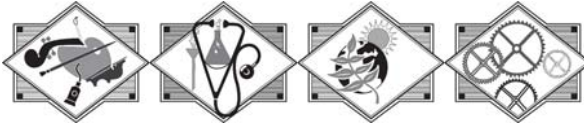


Natural Resources & Agriscience

# Science Department

## Course Description

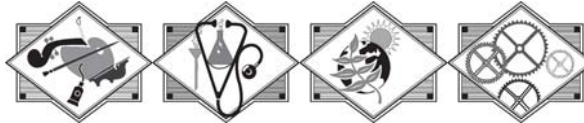
### CHEMISTRY I A - Course #9170/80 - 1 Year



This course is designed for the college-bound student interested specifically in a field of science for further study such as chemistry, physics, biology, medicine, engineering, etc. This class is theoretically and mathematically oriented. Emphasis is placed on laboratory solutions to theoretical problems.

Prerequisite: Teacher Approval

### AP CHEMISTRY - Course #9210/11 - 1 Year

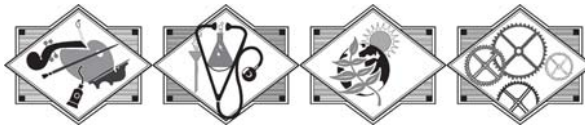


This course is designed to be the equivalent of the general chemistry course usually taken during the first college year. It builds and expands on the concepts learned during first year Chemistry to prepare students to take the Advanced Placement test given by the College Board. Laboratory is an integral part of this course. It may be necessary to complete some of the labs out side of class.

This course is strongly recommended for students interested in careers in engineering, medicine or any chemistry related field.

Prerequisite: Biology and Chemistry

### CONCEPTUAL PHYSICS - Course #9231 - 1 Semester



This course is a survey of traditional and modern physics topics including motion, forces, energy, electricity, light, sound, special relativity and nuclear physics. It is designed with an emphasis on the understanding of the concepts in physics, not on solving mathematical problems. This course is designed for students interested in career technical education or for college bound students interested in a non-science degree.

### PHYSICS - Course #9220/30 - 1 Year



Physics will complete the general biology, chemistry sequence for students in either the vocational education or college bound curriculum. This course is a survey of the traditional topics of motion, forces, energy, electricity, light and sound. The course is designed for the student with the stated background in mathematics, and interest in science. The Physics course will provide an adequate background for either the college bound general curriculum student or the vocational education student. It is an essential course for those interested in careers in physics, chemistry, astronomy and any engineering field. It is imperative to have geometry prior to taking physics.

Prerequisite: Chemistry and one year of Algebra.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services

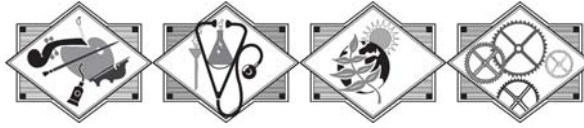


Natural Resources & Agriscience

# Science Department

## Course Description

### PHYSICS A - Course #9240/50 - 1 Year



This is a first year physics class designed for students contemplating advanced college education in scientific areas such as engineering, chemistry, astronomy, physics and the nuclear sciences. It is oriented to the application of advanced mathematics in the physical areas of mechanics, heat, sound, electricity, magnetism, light, atomic structure and nuclear physics. If the student drops below a “C” grade, based on the 10th week reporting, a conference will be scheduled with the teacher, counselor, and the student to determine the problem and consider a change in program. It is imperative to have Geometry prior to taking Physics A.

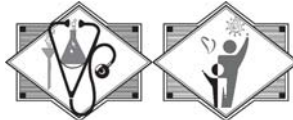
**Prerequisite:** Chemistry, Geometry, and Algebra II. Trigonometry may be taken concurrently.

### ENVIRONMENTAL SCIENCE - Course #9233 - 1 Semester



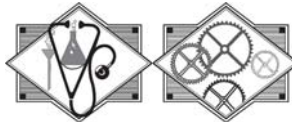
Environmental science is an interdisciplinary science that uses concepts and information from natural sciences such as ecology, biology, chemistry, geology and social sciences such as economics, politics, and ethics to help us understand how the earth works, how we are affecting the earth’s environment for us and other forms of life, and how to deal with the environmental problems we face.

### FORENSIC SCIENCE - Course #9280 - 1 Semester



Forensic science is a one semester class for 11th and 12th graders interested in applying science skills to solve “crimes”. Topics of study include: DNA studies, case histories, crime scene analysis, evidence collection, trip to the morgue, blood splatter analysis, blood typing (artificial blood used), handwriting analysis, chromatography, fiber studies and more.

### GENETICS - Course #9234 - 1 Semester



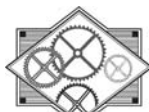
Genetics is the branch of biology that deals with the mechanisms of hereditary transmission and the variation of inherited characteristics among similar or related organisms. In order to study genetics one must have an understanding of how the cell is structured and how it functions. In this course we will also look at how genetics affects our society including the law and ethics.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Social Studies Department

## Course Offerings

2009/2010

### 9th Grade Requirement

The U.S. in a Global Economy \*  
The U.S. in a Global Economy A \*  
Civics Education \*  
Civics Education A \*

### 10th Grade Requirement

American History

### 11th Grade Requirement

World History

### Upper Level Courses

Geography and World Affairs \*  
Survey of Behavioral Science \*  
Law and Order \*  
AP American History

*\* Indicates One Semester Course*



Arts &  
Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# Social Studies Department

## Course Description

### Ninth Grade Required Courses

#### THE U.S. IN A GLOBAL ECONOMY - Course #5041 - 1 Semester



Global economics is a semester long class designed to introduce students to the world of economics. The students will gain an understanding of basic economic concepts, focusing on the United States and its integral role in the world economy.

#### THE U.S. IN A GLOBAL ECONOMY A - Course #5061 - 1 Semester



See description listed above. Objectives for this advanced course are the same except to incorporate an accelerated pace in order to be more thorough and to involve individual interest and special projects.

#### CIVIC EDUCATION - Course #5040 - 1 Semester



This Course will focus on the duties and responsibilities of citizenship as well as the law and the justice system of our country.

#### CIVIC EDUCATION A - Course #5060 - 1 Semester



This Course will focus on the duties and responsibilities of citizenship as well as the law and the justice system of our country in greater depth than the regular class. A research paper and projects may be required.

### Tenth Grade Required Courses

#### AMERICAN HISTORY 1900 TO PRESENT - Course #5030/31 - 2 Semesters



A chronological survey of our nation's past since 1900. This course will focus on foreign and domestic affairs with particular attention on Isolationism vs. Internationalism, Industrialization and the Labor Movement.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Social Studies Department

## Course Description

### Eleventh Grade Required Courses

#### WORLD HISTORY - Course #5150/51 - 1 Year



The survey course is designed to show the major political, economical, social, religious and intellectual developments in the world since 300 CE to present day. ("CE" stands for Common Era, used in place of "AD" (Anno Domini).)

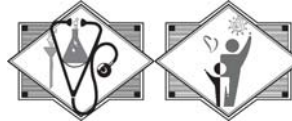
### Upper Level Courses

#### GEOGRAPHY AND WORLD AFFAIRS - Course #5055 - 1 Semester



This course of study will examine the historical relationship of humans to their physical and cultural environment. Geopolitical issues and topics will serve as the foundation for this class, as students explore the various regions of the world. Current economic conditions will be studied as well as the historical background of these major regions and nations.

#### SURVEY OF BEHAVIORAL SCIENCE - Course #5270 - 1 Semester



This course is designed to introduce students to the behavioral sciences: namely Psychology, Sociology, and Anthropology. The course will focus on the study of human behavior as an individual, as well as a member of groups, and group structure. Students will be presented with information designed to provide insight into their own behavior and that of others.

#### LAW AND ORDER - Course #5280 - 1 Semester



The goal of this class is to provide a practical understanding of law and the legal system that will be useful to students in their everyday lives. With this understanding, we hope to encourage effective participation in our legal system and to bring about greater justice, tolerance, and fairness.

Students in this one semester elective class will learn the basic structure of our legal system and the relationship between legislatures, courts, and law enforcement agencies. Students will learn about laws and processes involved in the justice system as well as those related to family and consumer law. Instruction will include topics such as contracts, leases, small claims courts, court trials, and other legal procedures. This class will hopefully help students learn how to choose courses of action to avoid potential legal problems and how to seek appropriate solutions for other legal matters. Activities will include role-playing, simulations, mock hearings, case studies and guest speakers from the community, such as police officers, judges, and attorneys.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# Social Studies Department

## Course Description

### AP AMERICAN HISTORY - Course #5300/01 - 1 Year, Grade 10-12



Advanced Placement American (United States) History is a challenging course that is meant to be the equivalent of a freshman college course and can earn students college credit. The purpose of this class is to prepare students for the Advanced Placement American History examination and for college-level courses. It is a two-semester survey of American History from the age of exploration to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography. This course is designed for Juniors and Seniors.



Arts & Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# SMJEC Shared Programs - Non CTE

## Course Offerings

2009/2010

AP Biology	Intro to Engineering
AP Calculus	Intro to Television Production
AP Chemistry	Internet Publishing I *
AP English	Internet Publishing II *
AP English Language & Composition	
AP Spanish	JROTC I
AP U.S. History	JROTC II
	JROTC III
Audio Recording and Technology I *	JROTC IV
Audio Recording/Sound Engineering II A & II B *	
Broadcast Speech *	Music Theory
	Music Theory II A *
Computer Graphic Design	Music Theory II B *
Computer Graphic Design II	Principles of Engineering
Computer Support & Service I*	Television Production
Computer Support & Service II *	3D Modeling I
Computer/Network Systems Repair A+	3D Modeling II
Construction Technology	Web Design I *
	Web Design II *
Drafting/Auto CAD Release 14	Advanced Web Design
Drafting/Auto CAD Release 14 II	

*\* Indicates One Semester Course*



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



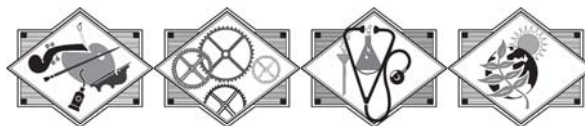
Human Services



Natural Resources & Agriscience

# SMTEC - Shared Programs - Non-CTE Offerings

**AP BIOLOGY – Course #6673/6774**  
**(SMTEC: FHS) – 1.5 Credits, 3 Semesters, Grades 10-12**



The AP Biology course is designed to be the equivalent of a yearlong college level Biology I course usually taken by biology majors during their first year of college. Students enrolled in this course will complete a detailed analysis of biological topics such as the chemistry of life, cellular structures and functions, genetics, diversity of organisms, ecology, cellular energy, embryology and DNA fingerprinting. Students taking this course will be engaged in college level reading and writing assignments, including creating a cumulative portfolio of scientific lab reports in preparation for taking the Advanced Placement Exam. Students have the opportunity to earn college credit for this course upon successful completion of the course work and taking the AP exam.

**Prerequisite:** Permission of your high school principal

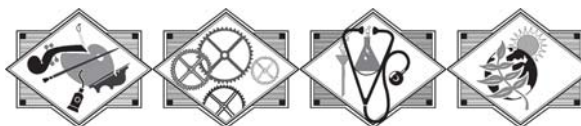
**AP CALCULUS - Course #6979/80**  
**(SMTEC: CLHS, WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 10-12**



Advanced Placement Calculus is a challenging course that is meant to be equivalent of a college level Calculus I course. The following concepts are covered: limits and continuity, derivatives, applications of derivatives, definite integrals, differential equations and mathematical modeling, and applications of definite integrals. Students have the opportunity to earn college credit for this course upon successful completion of the course work and taking the AP exam.

**Prerequisite:** Permission of your high school principal

**AP CHEMISTRY - Course #6975/76**  
**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grades 10-12**



Advanced Placement Chemistry is a challenging course that is meant to be equivalent to the first two semesters of college chemistry. This course is appropriate for motivated, capable students who, for a variety of reasons, may wish to place out of introductory college chemistry with credit. The AP Chemistry Exam, offered in May, is a course expectation.

**Prerequisite:** Permission of your high school principal



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *SMJEC - Shared Programs - Non-CJTE Offerings*

## *Course Descriptions*

### **AP ENGLISH - Course #6977/78**

**(SMTEC: CLHS, FHS, WWT) - 1-1.5 Credits, 2-3 Semesters, Grades 10-12**



This course is designed for students interested in pursuing college level English studies and leads to a national examination in May that could provide college credit and/or advanced placement. Challenging works of recognized literary merit are studied in depth. The structure, meaning and value of an individual work along with its relationship to contemporary experience are considered. In addition, the course requires the study and practice of writing. Students are expected to respond to language with sensitivity and discrimination, and to develop the ability to write expository, argumentative, and analytical essays. The ultimate purpose of the course is to prepare the students for a three-hour examination in May that will allow those whose AP Exam grade are considered acceptable, an opportunity to receive college credit and/or placement in advanced, more specialized college English courses.

**Prerequisite:** Permission of your high school principal

### **AP ENGLISH LANGUAGE AND COMPOSITION - Course #6771/72**

**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grades 10-12**



Students in this introductory college-level course read and carefully analyze a broad and challenging range of nonfiction prose selections, deepening their awareness of rhetoric and how language works. Through close reading and frequent writing, students develop their ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. Course readings feature expository, analytical, personal, and argumentative texts from a variety of authors and imaginative literature. Summer reading and writing is required. Students prepare for the AP Exam in English Language and Composition and may be granted advanced placement, college credit, or both as a result of satisfactory performance.

**Prerequisite:** Permission of your high school principal

### **AP SPANISH - Course #6981/82**

**(SMTEC: CLHS) - 1.5 Credits, 3 Semesters, Grade 12**



AP Spanish allows students to further their study of Spanish grammar and literature. It is intended for those students who wish to become proficient in all four language skills: listening, speaking, reading, and writing. There will be increased study of Spanish literature and awareness of the achievements of the Hispanic people through their art and architecture. Extensive work will be done in the organization and writing of compositions and oral communications. Students will have the opportunity to take the national advanced placement exam in Spanish with the possibility of earning college credit. Students will be required to take the National Spanish Exam at the end of the school year.

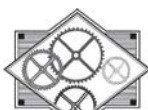
**Prerequisite:** Permission of your high school principal



Arts & Communication



Business Management  
Marketing & Technology



Engineering/Manufacturing  
& Industrial Technology



Health Sciences



Human Services



Natural Resources  
& Agriscience

# *SMTEC - Shared Programs - Non-CTE Offerings*

## *Course Descriptions*

**AP U.S. HISTORY – Course #6775/76**  
**(SMTEC: LHS) – 1.5 Credit, 3 Semesters, Grades 10-12**



Advanced Placement U.S. History is a challenging course that is meant to be the equivalent of a freshman college level course in U.S. History. The course is a survey of American History from the age of exploration to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking skills, interpretation of original documents, and historiography. Students taking this course will be engaged in college level reading, and writing assignments including preparation for taking the Advanced Placement Exam. Students have the opportunity to earn college credit for this course upon successful completion of the course work and exam.

**Prerequisite:** Permission of your high school principal

**AUDIO RECORDING AND TECHNOLOGY I - Course #6762/63**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 9-12**



This course introduces students to the study of audio recording, microphones, mixing consoles such as Pro Tools, and digital mastering techniques. Areas of instruction include: beginning music theory, physics of sound, basic electronics, sound reinforcement systems, multi-track recording, digital audio recording and signal processing. It is designed for the student who wants to gain skills in audio recording, those interested in creating their own home recording studio or those who want to become recording engineers.

**Prerequisite:** Computer knowledge of MS Word or equivalent

**AUDIO RECORDING/SOUND ENGINEERING II A: LIVE SOUND - Course #6767**  
**(SMTEC: FHS) - 1.5 Credits, 1 Semester, Grades 10-12**



This course is designed to give students, who have completed Audio Recording I, opportunities to put their skills to real working situations. Students will learn advanced techniques involving mixing, microphones, staging and work as sound technicians for live music performances and drama productions. Students will study the physics of sound and the equipment of sound reinforcement. The course will be project based and involve out of class lab and project time.

**Prerequisite:** Must pass Audio Recording and Technology I with a “C” or better



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *SMTEC - Shared Programs - Non-CTE Offerings*

## *Course Descriptions*

**AUDIO RECORDING/SOUND ENGINEERING II B: LIVE SOUND – Course #6768**  
**(SMTEC: FHS) – .5 Credit, 1 Semester, Grades 10-12**



This course is designed to give students, who have completed Audio Recording I, opportunities to put their skills to real working situations. Students will learn advanced techniques of studio recording, mixing, signal processing, mastering and production. The course will be project based and involve out of class lab time.

Prerequisite: Must pass Audio Recording and Technology I with a “C” or better

**BROADCAST SPEECH - Course #6747**  
**(SMTEC: FHS) - .5 Credit, 1 Semester, Grades 11-12**



With a focus on media literacy and public speaking students will participate in broadcast situations in order to develop their writing style, integrate real-life themes into writing and speaking, and build confidence when presenting before an audience. Students will learn to critically examine today’s media, and recognize bias. Students will participate in the production of the daily video announcements and learn how to effectively utilize broadcast equipment including a teleprompter, studio cameras, podium and more. Projects include news reports, editorials, sports segments, public service announcements and more.

**COMPUTER GRAPHIC DESIGN - Course #6983/84**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 10-12**



Students will learn techniques of creating and modifying selections, editing images, etc., through the tools and techniques of Adobe PhotoShop 5, and Illustrator 8. Students can apply such knowledge to the fine arts area or graphic design field. Basic knowledge of computers, as well as design, is highly recommended. Ninth graders will require teacher approval.

**COMPUTER GRAPHIC DESIGN II - Course #6723/24**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 11-12**



Students electing an advanced course will be working in drawing, painting, or 2-dimensional media.

**Prerequisite:** Successful completion of Computer Graphic Design.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *SMTEC - Shared Programs - Non-CTE Offerings*

## *Course Descriptions*

**COMPUTER SUPPORT & SERVICE I - Course #6971**  
**(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 10-12**



This course will cover computer operation theory as well as having many hands on experiences repairing and upgrading computers. Students will learn how to diagnose, repair and upgrade computers. IBM computers will be covered.

**Prerequisite:** Any high school computer course.

**COMPUTER SUPPORT & SERVICE II - Course #6972**  
**(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 10-12**



This self study program is designed to help prepare students for taking the A+ Certification test in P.C. Technologies, LANs, WANs, Internet, customer satisfaction and the specialty areas of IBM type computers. Students who wish to test for A+ Certification will arrange to test with Wave Technologies which charges the student a fee for administration of the test.

**Prerequisite:** Computer Support & Services I

**COMPUTER/NETWORK SYSTEMS REPAIR A+ - Course #6991/92**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 10-12**



This class is designed for students seeking a career in Computer Workstation support and repair. The class will teach students basic computer service concepts, how PC's work, how they attach to a computer network, and how operating systems like DOS and Windows control the computer hardware. Students will have the opportunity to earn CompTIA's A+ Certification. This certification is widely recognized and will allow students to gain immediate employment in the field of Computer Workstation support and repair. **This class may be taken as many times as necessary to reach certification.**



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# SMTEC - Shared Programs - Non-CTE Offerings

## Course Descriptions

### CONSTRUCTION TECHNOLOGY I - Course #6809/10 (SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 10-12



This course is designed to train and prepare students for jobs related to carpentry, electrical, plumbing, and mechanical repairs of public and private buildings. Training will include practical experiences in house construction, remodeling of various types, including repair of floors, ceilings, walls, painting and wallpapering. Students learn to install or replace electrical and plumbing fixtures, such as switches, lights, sinks and faucets. Externship training may be elected in the senior year. May be taken more than once for credit.

**General Qualifications:** Student should be physically able to perform duties normally associated with the construction trades.

\*\*\* *The Construction Technology course offers apprenticeship training in partnership with Associated Builders and Contractors, Inc. for 11th and 12th grade students. Upon successful completion of the training program, and high school graduation, students may continue apprenticeship at second year level - leading to journeyman status or enter a community college and apply apprenticeship credits toward a two-year degree.*

\*\*\* *Students may also enter the Detroit Carpenters Apprenticeship Training program (union) and complete a four year apprenticeship to receive their journeyman status. Students who are 17 years old by June of their junior year, may opt to be employed through the program during the summer between their 11th and 12th grade.*

\*\*\* *Students enrolled in apprenticeship training receive paid work experience while accumulating on-the-job training (OJT) hours necessary to become a journeyman.*

### DRAFTING/AUTO CAD RELEASE 14 - Course #6997/98 (SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 11-12



This class is offered to students who have successfully completed Drafting and Drafting/CAD, or who have teacher recommendation. Students will explore the fundamentals of working in traditional orthogonal views, isometrics, sections, and will be encouraged to individualize their work while learning about the world of computer drafting. The work will be performed on the computer in both AutoCAD Release 14 and Mechanical Desktop programs. Students will be encouraged to individualize and take part in various drafting and design competitions.

**Prerequisite:** Drafting/CAD or its equivalent



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# SMTEC - Shared Programs - Non-CTE Offerings

## Course Descriptions

**DRAFTING/AUTO CAD RELEASE 14 II- Course #6725/26**  
**(SMTEC: FHS) - 1.5 Credits, 3 Semesters, Grades 11-12**



This class is offered to students who have successfully completed Drafting/CAD and Drafting/Auto CAD Release 14, or who have teacher recommendation. Students will explore the fundamentals of computer-aided drafting and design at the advanced level. Students will work on competition drawings, such as architectural floor plans, working drawings, assembly drawings, and isometric and 3D model renderings.

**INTRODUCTION TO ENGINEERING DESIGN (IED) - Course #6703/04**  
**(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 10-12**



IED is an introductory course, which develops student problem solving skills, with emphasis placed on the development of three-dimensional solid models. Students will work from sketching simple geometric shapes to applying a solid modeling computer software package. They will learn a problem solving design process and how it is used in industry to manufacture a product. The Computer Aided Design System (CAD) will also be used to analyze and evaluate the product design. The techniques learned, and equipment used, are state of the art and are currently being used by engineers throughout the United States.

**INTRODUCTION TO TELEVISION PRODUCTION - Course #6963/64**  
**(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 9-12**



This class is designed to meet the needs of students interested in pursuing a career in video. Students will learn the techniques of today's video world, including developing story lines, how to use the video camera to get the perfect shot, proper lighting techniques, how to get great sound, and how to decide what to edit. Students will use the same tools as today's professionals including high-resolution video cameras and nonlinear editing software. **This class is a prerequisite for any student wishing to take Television Production.**

**Required Corequisite:** Broadcast Speech

**INTERNET PUBLISHING I - Course #6721**  
**(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 10-12**



Students will learn the fundamentals and processes employed by web page designers. The students will learn how to create HTML code, design web graphics, manipulate photographs, and use web design software.

**Prerequisite:** Passed a computer course with "B" or better.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# SMTEC - Shared Programs - Non-CTE Offerings

## Course Descriptions

**INTERNET PUBLISHING II - Course #6722**  
(SMTEC: CLHS) - .5 Credit, 1 Semester, Grades 10-12



Students will continue to learn the advanced fundamentals and processes employed by web page designers. Skills developed in this and the previous course will be put to use in developing and maintaining school and/or community websites.

**Prerequisite:** Passed Internet Publishing I with “B” or better.

**JROTC I - Course #6891/92**  
(SMTEC: CLHS, LHS) - 1.5 Credits, 2-3 Semesters, Grades 9-12



The JROTC program prepares high school cadets for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The program is a stimulus for promoting graduation from high school and provides instruction and rewarding opportunities which will benefit the cadet, community and nation. Must be a first year cadet and a ninth grader or higher. (LET 1).

**JROTC II - Course #6893/94**  
(SMTEC: CLHS, LHS) - 1.5 Credits, 2-3 Semesters, 1 Year, Grades 10-12



The JROTC program prepares high school cadets for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The program is a stimulus for promoting graduation from high school and provides instruction and rewarding opportunities, which will benefit the cadet, community and nation. Requires completion of the Leadership Education Training 1 (LET 1). Cadets are prepared for leadership roles in the corps of cadets. (LET 2).

**Prerequisite:** JROTC I

**JROTC III - Course #6895/96**  
(SMTEC: CLHS, LHS) - 1.5 Credits, 2-3 Semesters, 1 Year, Grades 11-12



The JROTC program prepares high school cadets for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The program is a stimulus for promoting graduation from high school and provides instruction and rewarding opportunities which will benefit the cadet, community and nation. Requires completion of the Leadership Education Training 2 (LET2). Cadets are prepared for leadership roles in the corps of cadets and participate in mentoring of younger students. (LET 3).

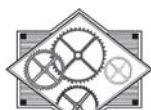
**Prerequisite:** JROTC II



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *SMTEC - Shared Programs - Non-CTE Offerings*

## *Course Descriptions*

### **JROTC IV - Course #6897/98**

**(SMTEC: CLHS, LHS) - 1.5 Credits, 2-3 Semesters, 1 Year, Grade 12**



The JROTC program prepares high school cadets for responsible leadership roles while making them aware of their rights, responsibilities and privileges as American citizens. The program is a stimulus for promoting graduation from high school and provides instruction and rewarding opportunities, which will benefit the cadet, community and nation. Those students who complete JROTC and are motivated to join the service are eligible for advanced promotion. Requires completion of the Leadership Education Training 3 (LET 3). Cadets are assigned to key positions in the corps of cadets and various leadership roles. Cadets participate in mentoring of younger students, train junior cadets, and serve as positive role models. (LET 4).

### **MUSIC THEORY - Course #6765/66**

**(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 9-12**



Learn music theory from beginning notation to 4 part harmony and simple form writing while developing MIDI keyboard skills. This course is computer and technology based; a basic knowledge of computer use is required. Students will use the music notation software Finale to compose their projects. No previous music background is required. However, the class will move at a rapid pace.

**Prerequisite:** Computer knowledge of MS Word or equivalent

### **MUSIC THEORY II A - Course #6764**

**(SMTEC: FHS) - .5 Credit, 1 Semester, Grades 9-12**



Students will write original compositions in a variety of styles. Students will learn writing techniques of the major music periods (Baroque, Classical, etc.) Students will study various music periods to gain knowledge of the composers, history, and common practices.

**Prerequisite:** Must pass theory I with “C” or better and have computer skills

### **MUSIC THEORY II B – POP, ROCK, RAP, COUNTRY – Course #6799**

**(SMTEC: FHS) - .5 Credit, 1 Semester, Grades 9-12**



Students will study history, style, and forms of pop, rock, rap, and country music. Listening examples, score analysis and historical events will be used to acquire an understanding of music during the past sixty years,

**Prerequisite:** Must pass theory I with “C” or better and have computer skills



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# SMTEC - Shared Programs - Non-CTE Offerings

## Course Descriptions

**PRINCIPLES OF ENGINEERING - Course #6707/08**  
(SMTEC: FHS) - 1 Credit, 2 Semesters, Grade 10-12



Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. The main purpose of this course is to experience through theory and hands-on problem-solving activities what engineering is all about and to answer the question, "Is a career in engineering or engineering technology for me?"

**Prerequisite:** Introduction to Engineering Design.

**TELEVISION PRODUCTION - Course #6965/66**  
(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 10-12



Students will examine aspects of media production including history, techniques, regulations and procedures. Students will experience hands-on opportunities using professional equipment as it relates to the course objectives. Working in a studio environment, students will learn pre-production techniques such as storyboarding, production techniques including shot composition, sound and lighting and also post-production techniques such as editing, animating and authoring. Students have direct access to industry standard equipment, hardware and software including Avid Xpress Pro DV, Adobe After Effects and Adobe Photoshop, Sony PDX10 mini-DV cameras, Ross Synergy Switchers and more. Projects throughout the semesters include stop motion animation, personal narrative, music videos, interviews, news reports and more.

**Prerequisite:** Must pass Introduction to Television Production with a "C" or better.

**3D MODELING I - Course #6993/94**  
(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 9-12



Students will explore the fundamentals of working in 3-D space while learning to model the geometry used in Architectural, Forensic and Visualization.

**3D MODELING II - Course #6995/96**  
(SMTEC: FHS) - 1 Credit, 2 Semesters, Grade 9-12



An additional two semesters of advanced work is recommended to students who are interested in the broadcast television aspect of 3D Modeling. This class will be taught in conjunction with the existing 3D Modeling class.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience

# *SMTEC - Shared Programs - Non-CTE Offerings*

## *Course Descriptions*

**WEB DESIGN I - Course #6959**

**(SMTEC: FHS) - .5 Credit, 1 Semester, Grades 9-12**



Students will learn how to create Internet Web Pages using Adobe Pagemill or Microsoft FrontPage. They will learn how to integrate tables, pictures, audio, java applets, and shockwaves animations into Web pages while exploring the design principles of 21<sup>st</sup> Century communications.

**WEB DESIGN II - Course #6960**

**(SMTEC: FHS) - .5 Credit, 1 Semester, Grades 11-12**



Web Design II is an advanced study in Internet Web Pages and exploring design principles.

**Prerequisite:** Successful completion of Web Design I

**ADVANCED WEB DESIGN - Course #6713/14**

**(SMTEC: FHS) - 1 Credit, 2 Semesters, Grades 11-12**



Advanced Web Design is an advanced study of Internet web pages and exploring design principles.



Arts & Communication



Business Management Marketing & Technology



Engineering/Manufacturing & Industrial Technology



Health Sciences



Human Services



Natural Resources & Agriscience