



Chippewa Valley Schools
19120 Cass Avenue
Clinton Township, MI 48038

Romeo Community Schools

BUSINESS MANAGEMENT TECHNOLOGY (RETC)

A must for all business students! Students will explore the foundation of business operations through practical activities. Topics include written and verbal communication skills, business etiquette, human relations, management, teamwork, finance, and career development. Students will utilize and apply essential business skills from the Microsoft Office 2010 Suite.

FINANCE - ACCOUNTING I and II (RETC)

Learn the language of business! Accounting I is a one-year course which covers two types of businesses – proprietorships and partnerships. Each type of business is presented in a complete accounting cycle which covers analyzing transactions, journalizing, posting to ledgers, petty cash, planning worksheet, financial statements, adjusting and closing entries. Banking accounts will also be covered through a practical project. A business simulation will also be done to reinforce concepts of the accounting cycle. Computerized accounting will be introduced. Some computer knowledge will be helpful, but is not required. FINANCE - ACCOUNTING II (RETC) This course is a continuation of Accounting I. The course begins with a review of the accounting cycle. The remainder of the course will focus on the accounting cycles for partnerships and corporations. Topics covered will include departmental accounting, payroll, inventory, notes payable and receivable, and preparation of financial statements. Computerized accounting will be implemented. Some computer knowledge will be helpful, but is not required.

MARKETING EDUCATION (RETC)

The one-year marketing program provides the student with basic marketing knowledge for entry-level job positions. Students will explore business vocabulary, specific skills and techniques in advertising, visual merchandising and display, selling, employability skills, purchasing, management, and numerous other areas related to marketing. Students will have the opportunity to join DECA, an association for those interested in marketing, entrepreneurship, and management. Through DECA, students will gain valuable skills at leadership conferences, have the opportunity to compete at district, state and national conferences, and be eligible for scholarship opportunities. Additional opportunity for travel to New York City for a five (5) day marketing career exploration is available for 2nd year DECA members.

ENTREPRENEURSHIP/SCHOOL STORE MANAGEMENT (RETC)

Entrepreneurship introduces students to the exciting world of creating and owning their own business. This course will cover feasibility studies, budgets, promotion, and other ownership concerns, including the development of a business plan. Course activities will be focused on developing the student's communication skills, initiative, creativity, flexibility, and problem solving techniques. Entrepreneurial theories will be reinforced with practical application through school store management. There will be a number of required after school responsibilities with store functions. Entrepreneurship students are expected to become involved in DECA (a national association of marketing and entrepreneurial students). Taking Entrepreneurship will make you a "completer" of the Marketing program.

WEB DESIGN (RETC)

This one-year class will enable students to create their own Web pages and Web sites. The class provides students with basic knowledge of Hypertext Mark-up Language (HTML) and Cascading Style Sheets (CSS) as a foundation for building websites. Utilization of web design software will also be explored. Students apply their skills in the creation of Web pages using text, graphics, tables, frames, and forms with an emphasis on effective design and layout of Web pages and sites. Topics will include: Web page and Web site design; common HTML coding as well as proper and effective Web page format.

HEALTH OCCUPATIONS EXPLORATION AND MEDICAL FIRST RESPONSE (RETC)

This science based class is intended for students who have an interest in pursuing careers in the medical field and allied health fields. While the class will meet all of the state requirements for medical first responder, students will be exposed to and be able to explore a wide variety of health occupations. Students will receive both classroom and practical instruction in a variety of patient related situations. Some topics include medical terminology, anatomy and physiology, patient assessment in medical and trauma settings, and cardio-pulmonary resuscitation. Additionally, students will receive instruction in basic medical mathematics, interviewing skills and resume writing. The premise of this class is to assist students in the decision of a medical career and provide basic and employable skills to achieve that goal.

EMERGENCY MEDICAL TECHNICIAN (RETC)

This science based class is intended and designed for students who have a serious interest in the medical or allied health fields. There is particular emphasis placed upon medical emergencies. Subject areas include comprehensive didactic and practical experience in anatomy and physiology, medical and trauma first aid assessment and treatment, airway management, cardiology, childbirth, pediatrics, bleeding and shock control. Students learn diagnostic techniques in conjunction with physiologic pathways to successfully treat patient conditions. Clinical rotations in a hospital

emergency room and fire department based ambulance service are components of the classroom experience. At the completion of the class, students who meet the eligibility requirements will be able to challenge the national EMT-B (Basic) licensing exam and receive a certificate of completion.

ADVANCED HEALTH OCCUPATIONS (RETC)

This is a 2-hour course for students interested in a professional career in the Health Care field. Students will acquire the basic skills and knowledge to work in multiple areas of health care, both within the hospital and in the community. This course will also provide a career foundation for students interested in continuing their education at the post-secondary level.

ALTERNATIVE ENERGY (RETC)

Right now, there are many sources of alternative energy which we could look at that may be less expensive, cleaner, and better for the environment and economy than using oil. This is an introductory course that explores the concepts of renewable energy and careers. Learn how the technologies work for an overview of renewable energies such as wind power, solar power, biomass, geothermal, fuel cells, and hydro power. Also learn what you can do at home right now and future careers you could explore. Hands-on activities are included in the class.

AUTOMOTIVE TECHNOLOGY (RHS)

This course, part of a nationally certified program, approaches the field of automotive technology from a dual perspective. Realizing that automobiles are a life-long presence in our lives, this class is taught from the point and perspective of the consumer in our auto-related world. The second perspective addressed in this class is basic career and skills preparation needed for training in the multiple, automotive-related career field. Emphasis is placed on both classroom and laboratory learning experiences.

ADVANCED AUTOMOTIVE TECHNOLOGY I and II (RHS)

This two-hour, two-semester class, part of a nationally certified program, prepares the student for the many facets of the automotive service and repair industry. This year is spent learning safety practices, equipment operation, career pathways and opportunities, extensive study of vehicle on-board computerized engine management systems, including fuel, ignition, and emissions controls, drivability diagnosis and repair. Extensive study and practice are encompassed in learning braking systems and brake repairs, including exposure to the multiple ABS systems encountered in today's auto repair industry. Additional time is spent learning general automobile and light truck service, maintenance, and minor repair. **ADVANCED AUTOMOTIVE TECHNOLOGY II (RHS)** This two-hour, two-semester class, part of a nationally certified program, allows students to service customers, schedule repairs with clients and order parts from suppliers. Educational focus for this class includes automotive electronics and electrical systems, service, and repair. Driveline diagnosis and repair are also extensively covered, with special emphasis on front wheel and all wheel drive components, service

and repair. Steering and suspension are investigated in depth, with electronic steering one of the many focal points of this unit. Engine cooling systems are explored and the relation that bi-metallic engines play in today's high technology engine, cooling system problems, is extensively reviewed. State mechanical certification in one or more areas is a primary course objective and goal.

CONSTRUCTION TRADES TECHNOLOGY I and II (RETC)

This course is an introduction to the construction industry. Students will learn how to use hand tools, power tools, and stationary machines with a strong emphasis on safety. Students will learn basic masonry, wall framing, wiring, plumbing, roof framing, roofing, drywall and the use of a transit. In addition, students will apply their newly acquired skills to general maintenance used around the house. Projects vary from semester to semester. Students who are considering a career in this cluster or interested in basic home improvement, should take this class. CONSTRUCTION TECHNOLOGY I and II (RETC) The construction technology program is designed for students who are interested in entering the carpentry, electrical, plumbing, heating, masonry trades, or related field such as architecture or engineering. Students will build a two story house in the construction tech lab. Site layout, masonry, concrete, floor systems, wall framing, roof systems, electrical, plumbing, cabinetry, mechanical systems and finish carpentry will be emphasized. New "green" technologies will also be explored and applied. Trades people from the area will facilitate each segment of construction. Additional projects will vary depending on collaborations with advisory committee members comprising of local contractors. Projects may include garages, sheds, concrete work and modular homes. Helping students understand the process in the construction of a home as well as the skills involved in each trade is the goal of this program. This class may be taken more than one time for credit.

HOSPITALITY AND FOOD SERVICES I (RETC)

The Romeo Culinary Arts Program is designed to provide students with a foundation of knowledge and basic skills used in a diverse food service industry. First year students will cover Career Options, Safety and Sanitation, HACCP Applications, Culinary Nutrition, Use of Commercial Equipment, develop proper Knife Skills and gather an understanding of how to follow recipes and gain employability skills.

ADVANCED HOSPITALITY AND FOOD SERVICES I and II (RETC)

Students taking this program should be considering a career in the Hospitality/Food Service industry. This course is designed to prepare the student for continued training in commercial kitchens. Creating menus, Baking Techniques, Breakfast Cookery, Meat, Poultry and Fish Cookery will all be covered. Students leaving this program will have product identification, equipment safety, strong knife skills and the confidence to advance in Culinary Arts. This class may be taken more than one time for credit.

DRAFTING AND ENGINEERING I (RETC)

Do you have an interest in cars, houses, buildings, models, designing or engineering? Do you like to draw, have ideas for inventions, or would like to improve your problem solving skills? Over the years, jobs have become more technical and skill intensive and most careers today have some sort of technical aspect to them. In this class, students will learn the basics of creating and reading drafted drawings and how to draw using AutoCAD 2010. Each student will also design and construct hands-on projects.

ARCHITECTURAL DESIGN I and II (RETC)

Do you have an interest in house design, interior design, or landscaping? Would you like to design your own dream home? In Architectural Design I, students will learn about the design and construction of residential architecture and create a set of personalized house plans. Students will learn how to draft by hand and with AutoCAD 2010. Students will also create house presentation drawings in Photoshop, interior design boards, a design portfolio, and learn about future careers and colleges related to the Architectural field. ARCHITECTURAL DESIGN II (RETC) Did you enjoy Architectural Design I and would like to further learn about residential architecture and how to design commercial buildings such as restaurants or retail stores? Have you ever gone into a public building and thought you could design it better? In Architectural Design II, these types of projects will be done using hand drafting, AutoCAD 2010 and Photoshop. Students will create their own set of construction documents, 3-D computer models, hands-on model building, presentation renderings, and interior design boards. Students will also leave the class with a Professional Architectural Portfolio compiled from the work accomplished in Architectural Design I & II to take to future career interviews and college.

MECHANICAL AND ENGINEERING DESIGN I (RETC)

Do you have an interest in vehicle design, mechanical parts, product packaging or other aspects related to Mechanical Design? Do you like to figure out how things work and come up with new designs? Almost everything man-made that surrounds us has been designed by someone and the next product could be yours. In Mechanical Design I, students will learn how to create mechanical drawings by hand, AutoCAD 2010, Inventor and Photoshop. Students will work on projects related to vehicle design, machining, and packaging and have the opportunity to design and build hands-on projects. Students will create their own drafting and design portfolio and learn about college and future careers related to the Mechanical field. MECHANICAL AND ENGINEERING DESIGN II (RETC) Did you enjoy Mechanical Design I and would like to further learn about the aspects of Mechanical Design? Have you ever been inspired by a new car's body style, found a product's packaging to be eye-catching or have an interest in how an object is assembled and made? In Mechanical Design II, an advanced look at projects covered in Mechanical I will be covered using hand drafting, AutoCAD 2010, Photoshop, Inventor and other 3-D modeling software. Students will draft real-life parts and assembly drawings, create 3-D computer models, build hands-on models, and put together presentation boards for a new product. Students will leave

the class with a Professional Mechanical Portfolio compiled from the work accomplished in Mechanical Design I & II to take to future career interviews and college.

ELECTRONIC APPLICATIONS (RETC)

This course will introduce a student to basic electronic circuits and their application to our world. Students will discover how electronic circuits work by building timers, oscillators, op-amps, and digital circuits that perform interesting tasks – everything from voice recorders to LED light displays. Concepts in circuit design are emphasized throughout the course. Schematic reading & drawing, soldering techniques, as well as circuit board layout and design. Any student who desires to learn through exploration, discovery, and using their hands will enjoy this course.

ELECTRONICS/MECHATRONICS I/II (RETC)

Articulation: Macomb Community College course EETE1100 (3 credits) This course is an in-depth exploration into the study of electronic circuit operation and design. Students will learn the basic “building block” circuits and how they function together to create electrical circuits of their own design – including digital alarm circuits, LED clocks, amplifiers, game circuits, automation, and power supplies. Concepts in circuit design are emphasized throughout the course. Students will learn prototyping methods (including circuit board design) and the use of electronic test equipment to aid in the troubleshooting and design of circuits. Any student planning a career in engineering or a related technical field should carefully consider taking this course.

ROBOTICS TECHNOLOGY (RETC)

This course is designed to help students master the fundamentals of robotics and the engineering design process. Students will design and build both autonomous and radio-controlled robotic devices in a fun, imaginative, and hands-on way. Concepts in science, technology, engineering and math are emphasized throughout the course. ROBOTC programming and Autodesk Inventor are used extensively in the build and design of robotic devices in this class. Students planning a career in engineering or a related technical field should carefully consider taking this course.

MACHINE TOOL TECHNOLOGY APPLICATIONS (RETC)

This metals class is an introduction to machine tool technology. The class will cover units in shop safety, basic precision measurement and layout work. Instruction is also given on the basic operations of metal cutting lathe, vertical milling machine, drill press, band saw and surface grinder. Instruction of basic machining set-ups and operations on the lathe, mill, surface grinder and band saws is also covered. Introduction of Computer Numerical Control (CNC) and Cad-Cam operation will be covered along with some basic welding. Integrated into the class will be applications of Algebra I & II and Geometry.

MACHINE TOOLING TECH I & II (RETC)

This course is an advanced study of machine tool technology and is preparatory for anyone who is interested in the metal finishing field. The three levels of this course will revisit and delve deeper into shop safety, precision measurements, and layout work. Instruction will range from basic set-ups and operations on the lathe, mill, surface grinder, drill press, and band saws to complex set up in fixturing, product design and development. Students will cover computer numerical control (CNC) and CAD-CAM operations with emphasis on G&M code programming. Basic welding is also covered. Articulation with Macomb Community College can provide up to 12 credits in the applied technology program on a student's successful completion of levels 1 and 2 of this class. Integrated into the class will be applications of Algebra I & II and Geometry.