

# Van Dyke Public Schools

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## **VISUAL IMAGING I/GRAPHIC COMMUNICATIONS I and II**

This course covers skills required for success in the 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 4, which includes; InDesign CS4, Photoshop CS4, and Illustrator CS4. VISUAL IMAGING II/GRAPHIC COMMUNICATIONS II 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 and through the application of Adobe Creative Suite 4. 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.

## **ACCOUNTING I and II**

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 Do you want to continue your training in the financial arena? You will learn differences in systems for private companies vs. corporations, explore accounting for property, inventory, accounts receivable, notes receivable and notes payable, and prepare for an entry-level accounting clerical position and/or entrance into a college business program.

## **COMPUTER APPLICATIONS I**

Are you technologically challenged? Do you want to improve your employment opportunities? If so, the answer is simple to becoming computer literate by learning the skills of Word Processing, Spreadsheet, Database Management, Presentation Management, and Keyboarding Skills. You can become prepared for industry certification in Microsoft productivity tools.

## **PHOTO EDITING & PUBLISHING**

Do you want to improve your photo editing skills? Would you like to create professional publications? This class can help you develop and design dynamic publications using

your creative abilities with Adobe Master Collection Photoshop & In-Design & Microsoft Publisher & Word. Digital camera & scanner could be used in creations.

## **WEB PAGE DESIGN I**

Do you have dreams of designing your own web page, but didn't know how? Would you like to have fun in creating animation? In this course you will digitally design web pages using Dreamweaver software, photo editing with Fireworks software, animation with Flash software, and exploration of Director and Cold Fusion software.

## **BUSINESS EXTERNSHIP (CO-OP)**

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.

## **HOSPITALITY, PERSONAL & CULINARY SERVICES I and II**

The first year Hospitality, 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, Personal & Culinary Services II course and an externship job placement in their senior year HOSPITALITY, PERSONAL & CULINARY SERVICES II Year two of our Hospitality, 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, Personal & Culinary Services III course and an externship job placement in their senior year.

## **HOSPITALITY, PERSONAL & CULINARY SERVICES IIIA & IIIB**

Year three of our Hospitality, 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. Employability skills are examined and enhanced when using what they study in the classroom and applying it to practical experiences and real life application in the commercial kitchen and restaurant.

## **HOSPITALITY/FOOD SERVICE EXTERNSHIP (CO-OP)**

Students with the desire to continue in any area of the Hospitality/Food Services 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.

## **MERCHANDISING & MARKETING I and II**

How does a business decide what to sell? How do you sell to customers? You will learn what it takes to get the product from the manufacturer to the person who buys the product, how to sell, human resource essentials such as communication skills and how to get along on the job with other workers, participate in BPA or DECA, a student organization that helps build leadership & networking through competition. MERCHANDISING & MARKETING II Emphasis will be on promotion, advertising & distribution of products to customers. Explore marketing careers in areas of buying & distribution, pricing, product planning, and entrepreneurship. Students will also be participating in BPA or DECA, a student organization that helps to build leadership skills and provides an opportunity for students to use what they have learned in Marketing in competition against other students from across the state. Students who complete Marketing I & II may be eligible to earn college credit for the Introduction to Marketing course at Macomb, Baker or Davenport.

## **MARKETING EXTERNSHIP (CO-OP)**

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.

## **STORE MANAGEMENT/OPERATIONS**

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.

## **ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY I**

• 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.

## **ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY II**

• Engine Performance – An instructional unit that 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.

## **ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY III**

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.

## **ASE/NATEF CERTIFIED AUTOMOTIVE TECHNOLOGY IV**

Auto IV—Engine Performance: The major focus of the class will be engine performance. This is a two-semester course designed to build upon diagnostic principles learned in the Brakes, Suspension and Steering and Electrical and Electronic Systems. With this

knowledge this course will expand into the realm of engine performance and drivability. This class is designed for the student to finish the NATEF task list and master their skills. A task list must be completed to NATEF requirements.

## **EXTERNSHIP (CO-OP), AYES INTERNSHIP**

The Externship program gives the senior automotive student the time and opportunity to gain experience in the real world of work. The Externship program 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.

## **DRAFTING /CAD I and II**

**DRAFTING I/CAD** This course is designed to introduce students to Computer Aided Design (CAD) using Unigraphics NX software. Skill emphasis is placed upon 3D solid model development, using the NX Sketcher in combination with various parametric and expression driven feature based modeling techniques. Students will also use NX to create engineering drawings. CAD Drafting concepts will include single and double auxiliary view development, section views, dimensioning techniques, ANSI & SI measurement, ISO symbols, threads & fasteners, basic detailing and an introduction to descriptive geometry. Students may also choose to participate in annual competitions such as those sponsored by ASBE and/or MITES. **DRAFTING II/CAD** This course is designed to prepare students for Advanced Placement Examinations offered by Macomb Community College by expanding the students understanding of 3D solid modeling using Unigraphics NX software. Skill emphasis is placed upon Jig/ Fixture Detailing and Assembly, Auto Body Design fundamentals, presentation and assembly drawings, sheet-metal pattern development, and calculations of tolerance and fits. Students may also choose to participate in annual competitions such as those sponsored by ASBE and/or MITES. Students enrolled in this advanced class are encouraged to be enrolled in Externship.

## **MANUFACTURING TECHNOLOGY I and II**

**MANUFACTURING TECHNOLOGY I** 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. Student competition will include MITES. **MANUFACTURING TECHNOLOGY II** 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 machines. Students may elect to participate in job shadowing, externship (co-op), and/or apprenticeships. Student competition will include MITES. The course will be connected with the Manufacturing Technology Program offered at Macomb Community College with dual enrollment opportunities.

## **TRADE & INDUSTRY EXTERNSHIP (CO-OP)**

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

## **ANATOMY & PHYSIOLOGY for HEALTH CAREERS**

This two semester course is designed to prepare students in making a successful transition to a post-secondary health science curriculum. The focus of this course is on human Anatomy and Physiology, with an emphasis in health career applications. In addition to the science academic foundations, the National Health Science segments include Communications, Healthcare System, Legal/Ethics, Growth and Development, Basic Skills, and Medical Terminology. Students that are interested in pursuing a health career would greatly benefit by completing this course.

## **DENTAL ASSISTANT**

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 hygienist, and a dental lab tech. The Dental Assistant program prepares students to provide patient care, processing and mounting dental radiographs (x-rays), prepares patients and equipment for dental procedures, and discharges office administrative functions under the supervision of a dentists. 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 dental impressions, and supervised practice.

## **EMERGENCY MEDICAL SERVICES**

This class is designed for students seriously interested in medicine – specifically emergency medicine to become an Emergency Medical Technician. 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 management, 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, the student 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.

## **MEDICAL ASSISTANT**

The Medical Assistant course 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 Aid, MIOSHA Safety Curriculum and the Health Science Core are taught. Employability skills are promoted. Upon successful completion of this course students may be eligible for an externship in 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).

## **NURSING ASSISTANT**

The Nursing Assistant course 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 students may be eligible for an externship in their senior year in various health care facilities. Job shadow opportunities are part of the curriculum. Students will be able to participate in the professional student organization HOSA (Health Occupations Students of America). Students may have the opportunity to apply for a position in the Certified Nursing Assistant (CNA) programs second semester.

## **PHARMACY TECHNICIAN**

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 sit and take the national exam offered by the Pharmacy Technician Certification Board.

## **PHYSICAL THERAPY PROFESSIONAL/AIDE**

The Physical Therapy Professional/Aide generally works in a rehabilitation facility or a hospital facility that works to improve patient mobility, relieve patient pain, and

prevent or lessen patient physical disabilities. This program includes an intense study of the human body and treatments necessary to help patients gain mobility after injury, surgery or due to physical ailments/diseases. Human anatomy and various body systems are covered, as well as an introductory study of kinesiology (human movement). The Physical Therapy Professional/Aide works under close supervision of a physical therapist and/or a physical therapy assistant and teaches the necessary skills that are delegated to a Physical Therapy Professional/Aide under their supervision. Physical Therapy Professional/Aide may work with people who have lost mobility as a result of a completed orthopedic medical procedure, including ligament repair, joint replacement, post-fracture care, back or neck surgery as well as with the geriatric population and the neurologically impaired (stroke victims, spinal cord injured patients). Common tasks delegated to a Physical Therapy Professional/Aide covered may include, but are not limited to: ordering supplies, filling out insurance forms, patient transportation, preparing for a patient's therapy sessions, tracking patient's use of machines and mobility activities. The participant of this class will also have opportunities to explore options in injury prevention and wellness, both in the community and in the corporate sector, including: data collection for movement screenings, educating the public on injury prevention and the importance of physical activity.

## **HEALTH SCIENCE EXTERNSHIP (CO-OP)**

Students that 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.

## **COSMETOLOGY I and II**

COSMETOLOGY I 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 4 hours per day, Monday-Friday in the afternoon from 1:30 p.m. - 5:33 p.m. COSMETOLOGY II Cosmetology II is the second year of the two-year Cosmetology program.

## **FIREFIGHTING**

This course includes firefighting skills which are mentally, physically, and emotionally challenging. Students that are admitted to this course will have extensive classroom and practical areas in the following; Fire Behavior, Self Contained Breathing Apparatus, Portable Extinguishers, Ropes and Knots, Building Search & Victim Removal, Ground Ladders, Water Supply Techniques, Laying, Carrying and Advancing Hose, Water Fire Streams, Salvage, Overhaul and Protecting Evidence of Fire Cause, Fire Cause and Origin, Incident Command Systems, Hazardous Materials First Responder Operations,

Rescue and Extrication Tools, Vehicle Extrication and Special Rescue, Ignitable Liquid and Flammable Gas Fire Control, Fire Incident Reports, Pre-Incident Survey and other areas to prepare them for minimum state firefighting certification. Students applying for this course are required to be at least a junior status with an average cumulative 2.0 GPA. Students considering this course need to be in good physical shape due to the strenuous demands that are essential to this program, including confined space, rescue, loading and advancing hose lines that are charged, and using ladder's that may be extended to 24 feet in height. All firefighting operations will require successful demonstration and will be graded. Authorization by a student's family physician is required before students will be allowed to participate in practical exercises and/or examinations. Most areas of study in firefighting are team oriented and students should be prepared for both individual and group team work.

## **LAW ENFORCEMENT**

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.