



Academic Year 2009–2010

CAREER TECHNICAL EDUCATION PROGRAM CATALOG

David H. Ponitz Career Technology Center (Ponitz CTC)

Career-Technical Education programs prepare youth to make informed career choices by developing their occupational, academic, and employability skills to successfully enter, post-secondary education, technical training, the workforce, or military.

Programming at the Ponitz CTC is organized around career communities. A career community is a small school within a larger school that is organized to provide high level academics and early career training. Following a year of academic study and career exploration within a Ninth Grade Academy, students in the 10th Grade at the Ponitz Career Technology Center select from one of four career communities:

Arts and Communication

Business and Information Technology

Health and Education

Industrial and Engineering Systems

Within each career community students take college preparatory courses in English, Math, Science and Social Studies and technical coursework for their selected career program.

A strong partnership with Sinclair Community College enables Ponitz Career Technology students to jump start their college education by earning free college credits while in the high school career community. Upon completion of their career community programs students are eligible for a \$3000 scholarship to use for tuition, books and fees at Sinclair Community College.

ARTS & COMMUNICATION CAREER COMMUNITY PROGRAMMING

TENTH GRADE COURSEWORK

Principles of Arts & Communication 1 Credit
VV 340010 VOX743
Introduces 10th grade students to the broad based skills required for a career in the arts and communication field. Students will be introduced to the career areas of digital design, entertainment marketing, radio & TV broadcasting and graphic design. An emphasis is placed on hands-on learning and developing the practical skills of employability.

ARTS & COMMUNICATION PATHWAYS

Digital Design Program 5 Credits
VT340015 VTX703/713
This program offers students in the 11th & 12th grade learning experiences that include theory, lab and work-based activities that introduce multimedia, graphic design, audio and video production. As students progress they develop skill in computer programming, web design, computer graphics and interactive media production. Postsecondary options include an associate degree in Visual Communications.

Entertainment Marketing – Radio/TV 5 Credits
VT340015 VOX703/713
This program is designed to give 11th and 12th grade students a background in the basics of the radio and television industry. Radio instruction includes on-air announcing, news and commercial production, engineering and the handling of equipment. TV instruction focuses on the operation of the studio and equipment, script writing, editing and production. Postsecondary options include an Associate of Arts degree as preparation for further study in the communications field.

Graphic Communications 5 Credits
VT340005 VTX523/533
This program offers specialized learning experiences to 11th and 12th grade students that include theory, laboratory and industry as they relate to all phases of layout and design, desktop publishing, presswork, binding and silk screening. Emphasis is placed on desktop publishing including digital image and electronic process procedures. Postsecondary options include an associate degree in Visual Communications.

BUSINESS & INFORMATION TECHNOLOGY CAREER COMMUNITY PROGRAMMING

TENTH GRADE COURSEWORK

Introduction to Business and Administrative Services 1 Credit
VV140050 VOX560
Introduces 10th grade students to the broad based skills required for a career in the business field. Students will be introduced to the career areas of office administration, financial services and business management. An emphasis is placed on developing critical thinking, communication and employability skills.

Introduction to Hospitality Management 1 Credit
VV 330015 VOX823
Introduces 10th grade students to the broad based skills required for a career in the hospitality and culinary industry. Students will learn basic culinary skills and the principles of hospitality management. An emphasis is placed on developing employability skills and mastery of sanitation and safety practices.

Introduction to Information Technology 1 Credit
VV 140200 VOX043
Introduces 10th grade students to the broad based application of technology within the fields of business and industry. Students will be introduced to the skills required to implement and maintain computer systems within large and small organizations. An emphasis is placed on hands-on learning and developing the practical skills of employability.

BUSINESS & INFORMATION TECHNOLOGY PATHWAYS

Business Management 5 Credits
VT 140800 VTX 073/083
This program for 11th and 12th grade students is designed to meet the needs of business employers. Students are introduced to business principles, office procedures, technology applications and legal concepts. As students progress they become proficient in project management, problem solving and information management. Postsecondary options include associate degrees in Business Information Systems, Legal Assisting or Marketing.

Cosmetology 6 Credits
VV 172602 VOX 363/373/383
This program for 10th, 11th and 12th grade students provides training to develop skill in a variety of beauty treatments such as hairstyling, cutting, coloring, corrective hair and scalp treatments, chemical hair relaxing, cosmetic applications, and manicuring. Students are taught the ethics of the profession, safety and sanitary practices, as well as management and business practices. Students also are involved in hairstyling competitions. Professional organizations, supply companies, and licensed individuals provide further information and training in the latest trends and products. Cosmetology is a three-year program designed in accordance with the State Board of Cosmetology's requirements. Entry level jobs in cosmetology are available to students upon receiving their license. Postsecondary options include associate degrees in Business Management and Business Entrepreneurship.

Culinary Arts/Hospitality Management

5 Credits

VT 090203

VTX 803/813

This program for 11th and 12th grade students is designed to meet the needs of the culinary arts/hospitality management industry. Students receive instruction and hands-on experience in menu planning, food preparation and presentation, nutrition, and customer relations. As students progress they develop an understanding of marketing, cost control, management skills, and communications. Postsecondary options include associate degrees in Culinary Arts or Restaurant Management.

Financial Services

5 Credits

VT 140110

VTX 113/123

This program for 11th and 12th grade students develops knowledge and skills for the financial services career sector. Students are introduced to the principles of economics, financial business practices including accounting and financial management. As students progress they will gain practical experience in banking, investment and stock market portfolio management and customer relations. Postsecondary options include associate degrees in Financial Services and Accounting.

Information Technology—Computer Support Services

5 Credits

VT 140210

VTX 023/033

This program for 11th and 12th grade students provides instruction in careers dealing with the inner working of the computer and with computer applications. Students will gain the skills to implement computer systems and software, provide technical assistance, and manage information systems. The curriculum leads to A+ certification opportunities. Postsecondary options include an Associate Degree in Computer Information Systems.

HEALTH & EDUCATION CAREER COMMUNITY PROGRAMMING

TENTH GRADE COURSEWORK

Introduction to Health Sciences

1 Credit

VV 070005

VOX433

Introduces 10th grade students to the broad based skills required within the health care industry. Students are introduced to the basic principles of patient care, medical practices and dental procedures. An emphasis is placed on exploring opportunities within the medical and dental fields and developing employability skills.

Public Safety Core

1 Credit

*VV 172812

VOX213

Introduces 10th grade students to the broad based skills required in the public safety career sector. Students are introduced to law enforcement, firefighting and emergency medical practices and procedures. An emphasis is placed on developing problem solving, communication and employability skills.

Principles of Scientific Inquiry

1 Credit

*VV 074850

VOX 673

This course for 10th grade students provides a foundation in scientific principles and laboratory practices. Students will develop their critical thinking and learn the required protocols for conducting scientific inquiry. An emphasis is placed on mastering laboratory safe practices and developing communication and employability skills.

HEALTH & EDUCATION PATHWAYS

Allied Health

5 Credits

VT 074830

VTX 663/613

This program for 11th and 12th grade students develops the skills needed by health care professionals. Students will gain knowledge and experience in medical assisting, nursing, patient rights and clinical procedures. In the summer between the junior and senior year, students will have the opportunity to receive nurse aid training and prepare for the state nurse assisting certification exam. Partnerships with local health network provide students with a wide range of work based learning opportunities within health care facilities. Postsecondary options include associate degrees in a wide range of health fields including medical technology, nursing and physical therapy.

Biotechnology

5 Credits

VT 074850

VTX 683/693*

This program allows 11th and 12th grade students to gain laboratory skills and techniques, communication skills, and entry level hands-on skills in Biology and Chemistry. Students apply scientific knowledge and skills in areas such as environmental research, genetics and criminal investigation procedure. Biotechnology is a cutting-edge technology and science. Biotechnology is one of the fastest growing fields that encompass the studies of Biomedical Science, Forensic Science, Biological and Chemical Manufacturing, Agriculture, Genetic Engineering, Pharmaceuticals, Alternative Fuels, Quality Assessment, Regulatory Agencies, Health and Food Production, and Bio-Marketing/Sales.

Students should enjoy hands-on science labs, like precision, and enjoy discovery and investigation. Postsecondary options include associate degrees in science or laboratory technology.

Dental Assisting

5 Credits

VT 070101

VTX 403/413

This program prepares 11th and 12th students for careers in the dental assisting field. Students learn skills in X-ray exposing and developing, mixing of dental materials, impressions, pouring and trimming models, general office procedures, patient recordkeeping, dental charting and chair side assisting for operative and emergency dentistry. Coursework prepares students to take the state licensing test in dental radiology and the Ohio State Dental Assisting Certification exam. Postsecondary options include an associate degree in Dental Hygiene.

Public Safety

VT 172802

VT 172801

This program for 11th and 12th grade students provides instruction and training in the techniques of law enforcement and firefighting. Students complete CPR and first aid training and gain an understanding of emergency telecommunications, correctional practices and emergency medical procedures and equipment. As they progress, students develop a comprehensive knowledge of the criminal justice system and law enforcement practices or they may choose to prepare for Level I firefighter and emergency medical certification. Postsecondary options include associate degrees in law enforcement, criminal science or firefighting.

5 Credits

VTX 223/233

Teaching Professions In Science And Math

VT 090011

This program for 11th and 12th grade students develops knowledge and skills required for the teaching career field. Instruction reinforces the academic learning of students' science and math classes and prepares students with the educational skills needed to teach in these content areas. Students will be introduced to educational psychology, teaching methods and classroom management techniques. As they progress, students will have the opportunity to gain practical experience in working with elementary and secondary students. Postsecondary options include an Associate of Arts degree and entry into a university teacher preparation program.

5 Credits

**INDUSTRIAL & ENGINEERING SYSTEMS
CAREER COMMUNITY PROGRAMMING****TENTH GRADE COURSEWORK****Principles of Production & Design**

VV 170006

This course for 10th grade students will expand student understanding of the connection between design and production processes. Students will be introduced to the principles of manufacturing and construction and gain experience in machine tool operations. Emphasis will be placed on the design process using both drafting and computer aided techniques.

1 Credit

VOX 903

Electrical and Transportation Systems

VV 170350

This course introduces 10th grade students to basic electronics terminology and the role of electronics in communications, engineering and transportation. Students will apply critical thinking techniques in analyzing electrical systems and diagnosing mechanical and automotive problems. An emphasis will be placed on problem solving, communication and employability skills

1 Credit

VOX 223

INDUSTRIAL AND ENGINEERING PATHWAYS

Automotive Technology

5 Credits

VV 170302

VOX 233/243

This program provides 11th and 12th grade students with the technical knowledge, skills, and practical experience required for a career in the automotive industry.

Students learn the basic skills of auto mechanics, quality assurance, electricity, trouble shooting and auto service. As students progress they learn hydraulic theory, engine repair, suspension and steering, brakes, and electrical systems. Postsecondary options include an associate degree in automotive technology.

Construction Technology

5 Credits

VT 171806

VTX 763/863

This program for 11th and 12th grade students develops the trade and technical skills required within the construction industry. Students will gain practical experience in fundamental construction skills, tools and equipment, safety practices, and project management. As students progress they will apply the full range of interior and exterior carpentry skills to a residential construction project. Postsecondary options include associate degrees in Construction Management, Architectural Design and Civil Engineering.

Engineering Technology

5 Credits

VT 171815

VTX 563/573

This program for 11th and 12th grade students integrates drafting, electronics, computer applications and engineering principles and the manufacturing process. Students apply systems thinking, design principles and engineering fundamentals to multi-discipline, project based learning activities. An emphasis is placed upon developing higher order mathematic and scientific reasoning to solve real world engineering problems. Postsecondary options include associate degrees in Mechanical, Safety and Electronic Engineering.