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APPLICATIONS



DUE BY



MARCH 1ST



2019-2020
Course Description Guide



Education for the Careers of Tomorrow

North Central Area Vocational Cooperative

College Credit Success **CERTIFICATION** BUSINESS



TECHNOLOGY *Performance* **workforce** *direction* INDUSTRY *Professional* COMPUTER TRADES *Academics*

OPPORTUNITIES

COURSES OFFERED . . .
EACH COURSE QUALIFIES FOR ELECTIVE CREDITS THAT STUDENTS CAN USE TOWARDS
A CORE 40, ACADEMIC HONORS OR TECHNICAL HONORS DIPLOMA

Automotive Technology I & II

- Course Overview:**
- Learn preventative maintenance skills to be able to work on suspension, brakes, electrical, alignments, engines, and transmissions.
 - Use a hands-on approach to analyze, diagnose, maintain and repair basic and advanced automotive systems.
 - Compete in competitions for tools, scholarships and awards through programs such as SkillsUSA.
 - Earn industry certifications through Automotive Service Excellence (ASE).
 - Earn opportunities for on-the-job internships at local shops.
- Career Focus:**
- Prepared for employment in the automotive field.

Aviation Flight

- Course Overview:**
- Provides a historic overview of the aviation field.
- Provides an overview of the careers and employment opportunities.
- Prepares new student pilots for the maneuvers required for performance during the Practical Test portion of the Private Check Ride.
 - Teaches concepts of basic aerodynamics, aircraft systems, instrument operation, weight and balance, flight physiology and a basic working knowledge of aircraft power plants and their construction, will be covered.
- Career Focus:**
- Ready to continue education at a 2 or 4 year post-secondary institution in the aviation field, or move into employment

CONSTRUCTION TRADES I & II

- Course Overview:**
- Covers major construction subject matter including: carpentry, concrete, residential, wiring, plumbing, heating and others.
 - Build a home for a resident.
- Use the latest construction materials and techniques to meet today’s building codes and energy requirements in the building industry.
- Career Focus:**
- Prepare for employment in the construction industry.
- Union apprenticeship programs.

Cosmetology I & II

- Course Overview:**
- This course trains students in theory and practice of cosmetology. It includes hairstyling, hair cutting, permanent waving, hair coloring, manicuring, pedicuring, facials and makeup with practical experience on clinic clients, mannequins and fellow students.
 - Also covered are basic chemistry, anatomy, Indiana Law, salon management and professionalism.
- Students take the state licensing exam and upon successful completion receive a cosmetology license.

- Career Focus:**
- Meet Indiana State Board Standards for Cosmetology and become a licensed professional cosmetologist who can have a successful and lucrative career.

Criminal Justice I & II

- Course Overview:**
- Develop specialized classroom training and hands-on skills, which are used in law enforcement, corrections and public safety fields.
 - Experience fundamental training which provides a foundation for society’s expectations of public safety professionals.
 - Acquire skills including patrol tactics, criminal and traffic laws, traffic violations and parking enforcement. In addition; hands-on training in arrest procedures, person searches and building/vehicle searches.
- Career Focus:**
- Be prepared for either post-secondary education or entry into the public safety/military service fields.

Culinary Arts I & II

- Course Overview:**
- Prepare students for occupations in the entire food industry and higher education programs for studies related to careers in Culinary Arts and expert food preparation and the hospitality industry.
 - Learn basic food safety, sanitation, purchasing, storage, and preparation.
 - Learn to apply culinary skills, maintaining and use of culinary tools and equipment, and learn skills in management principles in the food industry.
 - Learn the art of food science, dietetics, nutrition, baking, and pastry preparation.
 - Introduction to breads, pastry arts, cost control, and current marketing and hospitality establishments.
 - The second year builds on the skills and knowledge gained in the first year.
- Career Focus:**
- Preparing student to pursue a higher education in the culinary arts fields of expert food preparation, presentation and hospitality.

Early Childhood Education I & II

- Course Overview:**
- Early childhood education covers a child’s life from birth to nine years – a time of dramatic skill building and growth.
 - Prepares the student for a career working with children in the fields of education, social work, psychology, nursing and child-care.
 - Provides students with a greater knowledge of all areas of child development, new research in the field and best practices.
 - Prepare for a CDA (Child Development Associate Credential).

- Career Focus:**
- Prepared to take CDA (Child Development Associate Credential) test and begin career.

Graphic Imaging Technology I & II

- Course Overview:**
- Through hands-on work, many of the current printing and photographic methods are studied and products created.
 - Extensive use is made of Adobe Photoshop, Illustrator and InDesign.
 - Designed for anyone interested in the photography, commercial art/graphic design or graphic communications industries.
- Career Focus:**
- Students will be prepared to attend the college or art school of their choice, gain immediate entry-level employment in the graphic design field or begin a freelance career.

Health Science Education I & II

- Course Overview:**
- This is an introduction to Health Care Systems: Health Careers I and I, Health Care Practicum, Medical Terminology
 - These courses explore health-related disciplines, entry-level skills, education requirements, credentialing and job opportunities in many areas of the medical field, such as: RN (Registered Nurse), CNA (Certified Nursing Assistant), LPN (Licensed Practical Nurse), Radiologist, Medical Transcriptionist, PT (Physical Therapist), Physiologist, AT (Athletic Trainer), Pharmacist, Pharmacy Assistant, Medical Lab Assistant, EMT (Emergency Medical Technician), Dental Care, or even Animal Care
 - Syllabus includes medical terminology, anatomy and physiology, Indiana Health Occupations Education Competency Based Curriculum, health and safety coursed, healthy lifestyle and disease prevention.
 - Simulated in-class laboratory and extended laboratory experiences assist students to assume the role of health care provider.
- Career Focus:**
- Prepare for entry-level medical field workforce or post-secondary education in the medical field.

Industrial Automation And Robotics I & II

- Course Overview:**
- Theory and techniques of electric motor controllers.
 - Installation, use, maintenance and trouble shooting of mechanical drive components.
 - Understanding and use of various sensors and switches.
 - Understanding and trouble shooting of hydraulic circuitry.
 - Understanding and trouble shooting of pneumatic circuitry.
 - Pneumatic, hydraulic and mechanical controls.
 - Trouble shooting the automation process.
- Career Focus:**
- Ready to continue education at a 2 or 4 year post-secondary institution in an engineering type field, or move into positions in the manufacturing and industrial fields.

Networking I & II

- Course Overview:**
- Students will be trained to analyze business requirements and to design and implement an infrastructure for business solutions based on Windows 7 and Windows Server 2008 R2. This program includes installing, configuring and troubleshooting network systems.
- Career Focus:**
- Eligible for full or part-time placement based upon achievement level.
 - Continue education at a 2 or 4 year post-secondary institution.

Precision Machining I & II

- Course Overview:**
- Precision Machine Technology includes a wide range of classroom and laboratory experiences that develop skills and knowledge in the shaping of metal parts. Emphasis is placed on basic precision machining operations including the use of lathes, mills, grinders and bench work.
 - Instruction includes the use and care of other precision tools such as micrometers, indicators, gauge blocks, gauge pins and calipers. Advanced instruction will include preparation in the use and programming of Computer Numerical Controlled (CNC) machines that reflect current industry practices.
 - Application of mathematical skills and blue print reading, including GD&T, is part of the daily experience. Technical reading and writing skills will also be emphasized.
 - Current work place safety practices will be strictly enforced.
 - The nature of this course allows for a second year of instruction provided that content and standards address higher levels of knowledge.
- Career Focus:**
- Work force ready for a career in machining or continue on in post-secondary education.

Welding Technology I & II

- Course Overview:**
- Welding Technology includes classroom and laboratory experience that develops a variety of skills detailed in American Welding Society (AWS) Entry Level Guidance and Certifications.
 - Areas of study include electric welding and flame and plasma cutting.
 - Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols and mechanical drawing through projects and exercises that teach students how to weld industrial metals in four basic welding positions.
 - Reinforcement of mathematical skills in geometry, precision measurement and estimation will be part of the daily instruction.
 - Understanding the principles of metallurgy, gases and material science is integral to this course.
- Career Focus:**
- Prepared for further education and experience by attending college or a welding-associated technical school or immediate employment.