

2022-23

SOUTHEAST REGION CTC

REGISTRATION GUIDE

*This guide gives you CTE opportunities at the Wahpeton SRCTC Campus (Onsite),
ITV Classes, as well as Online & Cooperative offerings.*



Note: All ITV and SRCTC classes are full year courses. Once enrolled, you cannot be removed from them.

AGRICULTURAL EDUCATION

AVAILABLE FOR HANKINSON, FAIRMOUNT, CAMPBELL/TINTAH, AND MILNOR

Wyndmere, Lidgerwood, & Richland 44 have local onsite options, contact instructors for course offerings.

COURSE TITLE: Agricultural Education Food Processing/Food Science-Location-New Ag. Science Lab

Grades 11-12; 18 weeks; 1/2 credit

COURSE DESCRIPTION: Food Processing/Food Science is a new course for juniors and seniors that will take place in the brand-new Food Science Lab. This class will include a variety of agricultural processing demonstrations and group teamwork exercises such as food production, biofuels, meat cutting and meat processing, and scientific food analysis. Food science lab activities will include grain based, poultry, pork, beef and wild game processing including sausage making, packaging, and cooking.

COURSE TITLE: Ag. Mechanics and Ag. Engineering-Location-New Ag. Engineering Lab

Grades 11-12; 18 weeks; 1/2 credit

This is a lab-based engineering and production class that will focus on mechanical skills in welding, electrical, plumbing, hydraulics, CNC milling and computerized plasma cutting with a new Lincoln Torchmate 4400. In addition, students will have project-based instruction in advanced manufacturing, welding, fabrication, machining, metal fusion, a mechanical unit in small engines and Bobcat Skid steer loader operator and safety training. Students complete Career readiness skill development in respective personalized related career interest areas. Large capstone projects as group experiences are a highlight of this course.

BOTANY/HORTICULTURE & LANDSCAPE DESIGN

AVAILABLE FOR HANKINSON, FAIRMOUNT, CAMPBELL/TINTAH, AND MILNOR



COURSE TITLE: *Botany/Horticulture/Landscape Design*

Grades 9-12; 36 weeks; 1 credit (CTE or Science Credit)

COURSE DESCRIPTION: *This is a participation-oriented course focusing on the fundamental principles of horticulture. Students will be exposed to a variety of careers and to propagating plants in a greenhouse setting. Students will study botany/plant science, growing plants, the business of raising and selling plants, and small business management. Special emphasis will be placed on activities within the greenhouse setting. Students will have many opportunities to work in the operation and management of project in a modern greenhouse. Hands-on experiences will include computer assisted landscape design, home and business landscaping, commercial greenhouse operation, plant nutrition, landscape beautification, and community involvement through public flowerbed design and planting. Students raise a variety of bedding plants, flowers, ornamentals, and garden plants as a part of the lab activities and work on community floral projects. This class will meet ND Lab Science requirement for student's 3rd science credit.*

AUTOMOTIVE TECHNOLOGY



COURSE TITLE: Automotive Technology I

Grades 10-12; 36 weeks; 2 credits – this course is available for college/dual credit

COURSE DESCRIPTION: *Automotive Technology I is a comprehensive technical program designed to give students an understanding of the operation and maintenance of late model automobiles. Program emphasis is in the major area of basic service, fuel systems, engine tune-up, electrical systems, engine overhaul, tool use, and chassis systems. Students are eligible for SkillsUSA membership & competition and are also in the SRCTC/NDSCS Preferred Student Status Program.*

INSTRUCTIONAL OBJECTIVES AND/OR GOALS: *Upon completion of the course, students will have a basic understanding of the operation, maintenance, and repair of engine systems, electrical systems, fuel systems, and chassis systems. Students will be able to demonstrate proper human relations and communication skills in a working environment as well as develop basic skills in job seeking and career development in mechanical and repair fields.*

AUTOMOTIVE TECHNOLOGY COURSES ARE HELD AT SCHUETT HALL ON THE CAMPUS OF NDSCS.

DIESEL TECHNOLOGY

COURSE TITLE: *Diesel Technology I*

Grades 11-12; 36 weeks; 2 credits

PREREQUISITE: *Automotive Technology I (Highly Encouraged)*

This course is available for college/dual credit.

COURSE DESCRIPTION:

This course allows students to experience a variety of diesel and heavy equipment practices. Students will explore the field of diesel and heavy-duty equipment repair, and will learn the basics of safety, equipment identification, and the use of hand and power tools in lab setting. Students will learn about careers within the diesel and heavy equipment repair industry. Lessons will be enhanced by industry partners such as RDO, General Equipment, Butler, and Titan Machinery. Students will be introduced to diesel engine operation and components, hydraulics, brakes\suspension, and electrical. Technology related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum. NATEF standards and guidelines are followed. Students are eligible for SkillsUSA membership and competition.

INSTRUCTION OBJECTIVES AND/OR GOALS: *At the conclusion of the course, the students will understand the function of each unit and its components as it relates to diesel equipment. They will also be able to identify parts, handle most repair procedures, test procedures, and entry level diagnostic procedures as outlined by the manufacturers. Students will be able to demonstrate proper human relations and communications skills in a working environment as well as develop basic skills in job seeking and career development. This is a national award-winning program.*

*1st-semester is DTEC 110 Diesel Equipment Maintenance, DTEC 125 Intro to Heavy Duty Drive Systems , and 2nd semester is DTEC 135 Med/Heavy Duty Brake Systems **** These are needed in any of NDSCS Diesel Programs*

DIESEL TECHNOLOGY COURSES ARE HELD AT BISEK HALL ON THE CAMPUS OF NDSCS.

A parent/student meeting will be set before class starts to establish expectations.

CONSTRUCTION TECHNOLOGY



COURSE TITLE: Construction Technology I

Grades 10-12; 36 weeks; 2 credits

COURSE DESCRIPTION: *The Construction Technology I program is designed for students who like to work with their hands, build, be innovative, take pride in a finished project, and have an interest in carpentry or a construction related area. Students who already have some basic shop skills or want to start a construction trade career can gain a wide variety of skills and experience from the Construction Technology Program. Students are eligible for membership in SkillsUSA and related skill and leadership competitive events. Students have the opportunity to learn entry-level construction skills and perform most residential construction tasks including reading blueprints, calculating measurements, house framing, and finishing. Students will take part in building a new home as a practical way to practice and develop skills in the construction industry. The National Center for Center for Construction Education and Research – Core Curriculum and Carpentry Level I is used, giving each student the opportunity to have national recognition for their completed construction modules. 10-hour OSHA training certificates are part of the instruction and can help students with future employment. Each student will take part in the Bobcat Skid Steer Loader Operator Training Course.*

DUAL CREDIT – Opportunity for 2- 2 Credit Classes through NDSCS – Finalizing details towards a construction management degree.

COURSE TITLE: Construction Technology II

Grades 11-12; 36 weeks; 2 credits

COURSE DESCRIPTION: *Students in Construction Technology II assume a leadership role as student foreman on the job site. Students will help with the instruction of first year students by providing a helping hand and using the experience of their first-year instruction. In addition, students will have “hands-on” experiences with power tools, blueprints, wall and partition layout, roof framing and shingling, window and door installation, house wrap, and exterior finishing to include siding, soffit and fascia. Students will be involved with drywall application and finishing, woodwork, trim, cabinets, and door hanging. Students are eligible for membership in SkillsUSA and related skill and leadership competitive events. The National Center for Construction Education and Research Core Curriculum and Carpentry Level I will be used, giving each student the opportunity to have national recognition for their completed construction modules. 10-hour OSHA training certificates are required (which are completed in Construction Technology I) Each student will take part in the advanced Bobcat Skid-Steer Loader Operator Training Course.*



COURSE TITLE: Summer Internship

Grades 11-12: 150 hour; 1 credit

Prerequisite: Construction Technology I or Construction Technology II or other background as approved by Administration.

COURSE DESCRIPTION: *Students are in a learn and earn internship where they work on-site, 40 hours per week and are paid an hourly wage.*

MEDICAL AND HEALTH SCIENCES



COURSE TITLE: *Medical and Health Sciences I & II*

Grades 10-12; two period block; 36 weeks; 2 credits

COURSE DESCRIPTION: *This course is designed to provide an overview of the therapeutic, diagnostic, environmental, and information systems of the health care industry. Curriculum involves history and current trends in medicine, careers in the medical field, personal characteristics necessary to work in the medical field, legal and ethical issues in medicine, growth and development of the human body and mind, technology in medicine, sudden injury and illness management, patient assessment skills, anatomy and physiology including pathophysiology and treatment of diseases/illness, CPR instruction and certification, geriatrics and the aging process, cultural diversity in medicine, diet and nutrition, and preparing for the work world. The Medical and Health Science course will help prepare students for collegiate level college courses in a medically related fields and is challenging in terms of content and preparation. Successful completion results in students being better prepared for future post-secondary careers and advanced medical and health science programs at colleges and universities.*

This course provides students considering health careers an opportunity to develop a broader knowledge and insight into the work of the health professionals. All students also become First Aid and CPR certified. Some of the experience include: Registered Nurse, Licensed Practical Nurse, Athletic Trainer, Sports Medicine, Medical Technician, Chiropractor, Dentist, Dental Hygienist, Dental Assistant, Emergency Medical Technician, EEG and EKG Technician, Radiology Technician, Medical Laboratory Technician, Optometrist, Pharmacist, Physician, Physician Assistant, Veterinarian, Medical Records Technician, Surgical Technician, and Nursing Assistant.

RESTAURANT MANAGEMENT CHEF TRAINING

COURSE TITLE: *Restaurant Management/Chef Training I*

Grades 10-12; 36 weeks; 2 credits

COURSE DESCRIPTION: *This course of study is designed to provide student with skills in the food service and hospitality industries. This includes food preparation, service techniques, restaurant management and operation of food service businesses. Students will learn a variety of chef functions including menu planning, cooking, portion control, human relations, catering, baking, and employee supervision. Students will work in lab settings that focus on the actual preparation and serving of professional prepared meals.*

INSTRUCTION OBJECTIVES AND/OR GOALS: *Upon completion of the Restaurant Management and Chef Training program students will be prepared for careers in the food service industry as cooks, bakers, mid-level restaurant managers, catering employees, or a variety of positions in institutional food service setting such as schools, hospitals, and colleges.*



WELDING TECHNOLOGY

COURSE TITLE: *Welding Technology I*

Grades 10-12; 36 weeks; 2 credits

PREREQUISITE: *Intro to Ag*

This course is available for college/dual credit.

COURSE DESCRIPTION:

This course introduces students to a career in welding. The course begins covering various types of metal welding, brazing, flame cutting, properties of metals, blueprint reading, electrical principles, welding symbols and mechanical drawing. Emphasis on applied academics, professional development, leadership, and organizational skills are integrated throughout the curriculum. Students are eligible for SkillsUSA membership and competition.

INSTRUCTION OBJECTIVES AND/OR GOALS: *At the conclusion of the course, the students will understand the function of each welding process. They will also be able to identify parts, handle most repair procedures, test procedures, and entry level blueprint reading / building as outlined by the manufacturers. Students will be able to demonstrate proper human relations and communications skills in a working environment as well as develop basic skills in job seeking and career development.*

1st-semester is MFGT 110 Industrial Shop Practices, and 2nd semester is MFGT 123 Fabrication Methods I ** These are needed in any 11 different Programs at NDSCS including Auto, Ag, and Diesel.**

WELDING TECHNOLOGY COURSES ARE HELD AT TRADE TECH II HALL ON THE CAMPUS OF NDSCS.

CTE - ITV Course Offerings

COURSE TITLE: AG SCIENCE MISO3 – 01021(CTE) or 13024(Science) (6th Period)

Grades 10-12; 1 credit CTE or Science Credit

COURSE DESCRIPTION: Agriscience Technology courses integrate biological and technological concepts with principles of agriculture. Courses are designed in sequences to provide experiences in the subject matter. Units are selected to develop knowledge and skills pertaining to nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology in animals and plants. Genetic engineering, biotechnology, plant propagation techniques, agricultural production techniques, marketing techniques, aquaculture, animal health, and small animal care are examples of units that may be taught.

COURSE TITLE: EMERGENCY MEDICAL TECHNICIAN (EMT) (5th & 6th Periods)

Grades 10-12; 1 credit

COURSE DESCRIPTION: The EMT – basic class is an introductory course for the student who aspires to become an Emergency Medical Technical-Basic. Student learning will focus on human anatomy and physiology, disease process, initial assessment and patient stabilization, proper use of equipment such as automatic external defibrillators, blood glucose monitors, MAST Trousers, airway adjuncts as well as legal issues, scope of practice, extrication, documentation, communication, and ambulance protocols.

COURSE TITLE: ADVANCED EMERGENCY MEDICAL TECHNICIAN (7th Period)

Grades 10-12; 1 credit

COURSE DESCRIPTION: The Emergency Medical Technician-Advanced (EMT-A) Training Program furthers the student in the EMS career field. The EMT Advanced student builds on the knowledge and skills learned in the EMT Basic course. In addition, students learn to perform advanced treatment skills including: intravenous access and advanced airway management. EMT Advanced students are further prepared to take on a leadership role to fellow EMTs. The EMT-A is much more likely to develop a career in fire departments, ambulance services, and even emergency rooms and clinics.

COURSE TITLE: MEDICAL & HEALTH SCIENCE I (2nd & 3rd & 6th Periods)

Grades 10-12; 1 credit; 36 weeks

COURSE DESCRIPTION: This course is designed to provide an overview of the therapeutic, diagnostic, environmental, and information systems of the health care industry. Curriculum involves History and Current Trends in Medicine, Careers in the Medical Field, Personal Characteristics Necessary to work in the Medical Field, Legal and Ethical Issues in Medicine, Growth and Development of the Human Body and Mind, Technology in Medicine, Sudden Injury and Illness Management, and Patient Assessment Skills. A significant portion of this program includes a variety of lab and group projects where students are actively engaged. Computer assisted instruction, Brain Honey, internet and social networking programs are all incorporated as part of the instruction. The Medical and Health Sciences I course will provide students assistance in determining their own career and educational plans.

CTE - ITV Course Offerings

COURSE TITLE: MEDICAL & HEALTH SCIENCE II

(4th & 5th Periods)

Grades 10-12; 1 credit; 36 weeks

Pre-requisite: Previous or Concurrent Medical and Health Science I

COURSE DESCRIPTION: This course is designed to provide information and overview of the therapeutic, diagnostic, environmental, and information systems of the health care industry. Curriculum involves Anatomy and Physiology including Pathophysiology and treatment of diseases/illness, CPR instruction and certification, Geriatrics and the Aging Process, Cultural Diversity in Medicine, Diet and Nutrition, and Preparing for the Work World. A significant portion of this program includes a variety of lab and group projects where students are actively engaged. Computer assisted instruction, Brain Honey, internet and social networking programs are all incorporated as a part of the instruction. The Medical and Health Sciences II course will provide students assistance in determining their own career and educational plans.

COURSE TITLE: Sports Medicine-Prevention and Care of Athletic Injuries

Grades 10-12; one period; 18 weeks; ½ credits (1st Period Both Sem & 7th -Period 1st Sem only)

COURSE DESCRIPTION: Provides the student with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder daily management for athletic or personal sports injuries and skills to fulfill the activities of daily living. Students will be able to in on semester complete the requirements to become a student athletic trainer.

COURSE TITLE: MOBILE APPLICATIONS DEVELOPMENT/ INTRODUCTION TO CYBERSECURITY (Period 5)

Grades 10-12; 1 credit

COURSE DESCRIPTION: This course will introduce students to mobile application development and management using a variety of commercial and open-source software. Topics to be included in the course are: (1) Installation and modification of application; (2) Code modification; (3) Design and implementation; (4) Database systems management; (5) Security; and (6) Customer Service. Introduction to Cybersecurity covers trends in cybersecurity and career opportunities. Course modules will define cybersecurity, explain why it's important, and introduce products and processes used to secure data. Students will also explore why cybersecurity is critical in business and medical industries, how hackers use unsuspecting individuals to propagate malware, and why cybersecurity is a growing profession.

CTE - ITV Course Offerings

COURSE TITLE: Entrepreneurship – MISO3- 04111 (1st & 5th Periods)

Grades 10-12; 1 credit

Course Description: Entrepreneurship is a course designed to introduce the process of turning an idea into a successful start-up business. A primary focus is for the student to explore the potential of being a successful entrepreneur. The course introduces the student to the processes for creating a successful business plan. The student will use entrepreneurial discovery processes, assess opportunities for venture creation, and develop communication skills to convince others of the potential success to implement the business entity. This course also includes units on personal finance and web page design. The student will explore topics that include creating and designing appealing and technically sound websites for businesses as well as successful long-term saving and investing strategies. Projects in this course will include creating, developing, and presenting a hypothetical business plan, designing a website, and composing a theoretical investment portfolio. Students in this course will have the opportunity to showcase and improve on their skills at DECA contests and conferences throughout the year.

COURSE TITLE: Marketing Education I – MISO3 – 04210 (6th Period)

Grades 9-12; 1 credit; 36 weeks

Course Description: Marketing Education I provides student with an overview of marketing occupations. It covers human relations, personality in business, business math and communications, cash register operation, change making, employee cooperation, personal grooming, career opportunities, product knowledge, consume buying motives, and personal selling. Marketing function including distribution and selling & foundations of economics.

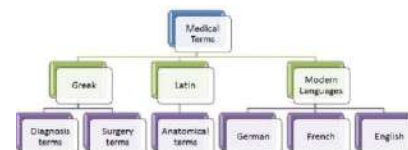
COURSE TITLE: Sports and Entertainment Marketing – MISO3- 04240 (7th Period)

Grades 9-12; 1 credit; 36 weeks

Course Description: Sports & Entertainment Marketing is a business course designed to use today's broad based athletic, sports and entertainment dynamic as a foundation for students to learn communication skills in concert with advertising, sales, marketing, and media development. Students will learn how to develop marketing strategies with a focus on advertising media targeted at the world of college and professional athletics and major entertainment venues. The final project for the class will consist of student developed multi-media presentations for the marketing of a professional athletic team or major entertainment attraction. Internet marketing activities will include learning how to utilize Google research and marketing tools and how to market and sell items with on-line auction tools including actual set up and live sales on E-Bay.

ONLINE COURSES

All work for these on-line classes are on the students' own time or as scheduled during a free period or during study hall. Students are responsible to provide their own computer access and have a current and valid k12.nd.us e-mail account



COURSE TITLE: Medical Terminology

Grades 11-12; 36 weeks; 1 credit (4 Credit Dual Credit Option via NDSCS)

Prerequisites: Medical and Health Sciences concurrent or previous enrollment

COURSE DESCRIPTION: *In this on-line course, students will develop skills necessary for decoding of commonly used medical terms. Students will learn the meaning of medical suffixes, prefixes, and work roots. Students will learn terminology associated with the body systems, diseases, and disorders of those systems. Students will be expected to use correct spelling and pronunciation of the medical terms they have learned. Students will also learn medical abbreviations.*

COURSE TITLE: Concepts of Fitness and Wellness

Grades 11-12; 36 weeks; 1 credit (2 Credit Dual Credit Option via NDSCS)

Prerequisites: Medical and Health Sciences concurrent or previous enrollment

COURSE DESCRIPTION: *A course designed for students of all ages that teaches the facts about exercise and physical fitness. This course is designed to teach the student the role of physical activity in maintaining adequate health and improved quality of life. Also, how to assess, develop and implement a completed lifetime fitness and wellness program and its components. The course is designed to incorporate these ideas through lecture and activity.*

COURSE TITLE: Introduction to Veterinary Science

Grades 10-12; 18 weeks; ½ credit

COURSE DESCRIPTION: *The basic concepts of veterinary medicine are presented. The course focuses on the different body systems of the major species of pets and domesticated agricultural animals. Each lesson examines concepts in veterinary medicine to provide the student with a broad understanding of today's field of veterinary science. The final lesson is a career research project which give students the opportunity to investigate a specific career in veterinary medicine.*



COOPERATIVE WORK EXPERIENCE



ELECTIVE: Open to all students currently enrolled or who have been enrolled in a career, technical, business, or agriculture education programs.

CREDIT: One credit upon completion of 360 clock hours of approved on-the-job training. Students may receive ½ credit for 180 hours of OJT.

PREREQUISITES: Past or present enrollment in a Career/Tech class.

(Cooperative Experiences cannot be used to meet one of your minimum class requirements!)

Cooperative Work Experience is designed to provide students with on-the-job training and practical experience in addition to a comprehensive high school education. Students work at jobs relating to their individual career interests and are supervised by their employer and coordinator/instructors that also complete evaluations on each student's work performance. Students are paid so they can earn and learn at the same time. Students should average about 10 hours per week; 360 hours during the school year for one credit.

Variations of the work experience program are available to students involved with special services and are coordinated by the Center staff. A non-co-op, straight work experience program

may be approved for students who have not taken a Career/Tech class as approved by the Center Director and Home School Principal.

The following guidelines are provided to give students interested in or involved in the Cooperative Work Experience Program a list of expectations and requirements for successful involvement and completion of the program.

- 1. All students must be in attendance and registered on a full-time basis. For seniors one registered period per day may be qualified cooperative work experience component. Release from school will be granted for one period per day as part of that experience.*
- 2. For 9th and 10th grade students, no release from school is permitted for cooperative work experience. Juniors may be released from school only by special exception. This exception must have approval from the home school principal, and CTE Director.*
- 3. Students must register for the Cooperative Work Experience Program just as they register for any other class with appropriate approval from parents and their high school principal.*
- 4. Students are not to count on their credit from the cooperative work experience program in meeting their high school graduation requirements. Loss of employment or a change in job availability will not be allowed to prevent a student from graduating from high school.*
- 5. Students enrolled the Cooperative Work Experience Program are expected to maintain passing grades in school, maintain regular attendance and not allow their out of school work to conflict with their educational program.*
- 6. Students who enroll in Cooperative Work Experience do not have to use school time to take part in the program, but may include after school or weekend hours in order to balance the time requirement of school, studies, extracurricular involvement, and still enjoy a cooperative work experience job.*
- 7. One unit of credit will be granted for successful completion of all requirements of the Cooperative Wok Experience Program. A limit of one credit is placed upon a student for a work experience that takes place at one job station. These requirements include:*
 - a. Students are receiving or have received instruction in a career, technical, business, or agriculture education program.*
 - b. 360 hours of work experience = 1 credit. This is an average of 10 hours per week.*
 - c. The work state/job site conforms to state and federal wage and hour laws and regulations.*
 - d. Students maintain the required way and hour documentation.*

Fulfilling the requirement set forth by the supervising teacher-coordinator.

Southeast Region Career & Technology Center Dual Credit with NDSCS

Students enrolled in Auto Technology I, Construction Technology, Diesel Technology I, or Welding Technology 1 may apply for dual credit. This opportunity provides students with both high school and college credit at the same time for a third of the cost. Students enrolled in dual credit career classes pay only 30% of the normal tuition rate. See the program instructor or your counselor for individual program credit earning potential or check online at <https://www.ndscs.edu/get-started/identify-my-unique-needs/dual-credit-high-school-students/> for more information.

CO-CURRICULAR ACTIVITIES

FFA - provides training for agricultural and general leadership. It provides an opportunity to compete at the local, state, and national levels in various competitions.

DECA - DECA is a leadership organization for students at the high school with an interest in marketing, management, and entrepreneurship.

Skills USA - provides quality education experiences for students in leadership, teamwork, citizenship, character development, and work ethic. It also builds and reinforces self-confidence, work attitudes and communication skills.

NORTH DAKOTA SCHOLARSHIP PROGRAM

SRCTC Member School students last year earned will over a half million dollars in North Dakota Scholarships due to enrolling in, and having successful, comprehensive high school experiences. To be eligible for a \$6,000 ND Scholarship students must take four credits of CTE classes, two of which must be in one program area, minimum of 3.0 GPA, have no grade lower than a C while in high school, and get either three 5's on the ACT Work Keys Test or a 23 on the traditional ACT. The biggest single advantage of the CTE Scholarship is that students can take either the ACT Work Keys or Traditional ACT Test. The CTE Scholarship can be used at any North Dakota University, 4 year college, or two year college and students may enroll in any program of study.

Programs and courses are offered as a partnership between the public schools of Campbell-Tintah, Edgeley, Ellendale, Fairmount, Hankinson, Lidgerwood, Lisbon, Milnor, North Sargent, Oakes, Richland #44, Sargent Central, Wahpeton, Wyndmere and the Southeast Region Career and Technology Center.