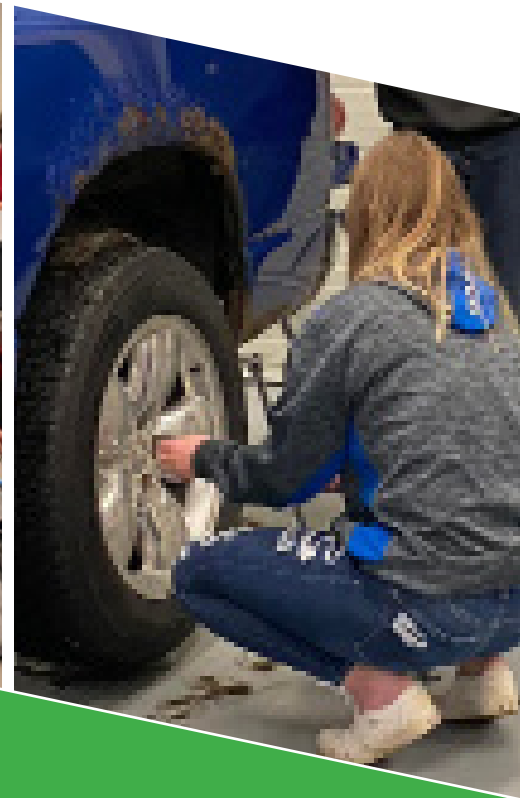




**GREAT  
WESTERN  
NETWORK**

**GNWACTC**  
GREAT NORTHWEST AREA  
CAREER AND TECHNICAL CENTER



**22-23**

# **COURSE CATALOG**

**AND PROGRAM INFORMATION**

PLEASE NOTE: ALL registrations from each of the listed distance providers (CRACTC, GNWACTC, GWN, and RACTC) should be completed IN FULL using the Western Dakota registration form found at <https://tinyurl.com/22-23RegForm> or contact Alissa Thiele for a copy of the form.  
Please send completed registration forms to Alissa Thiele, Western Dakota Registrar, at [Alissa.Thiele@k12.nd.us](mailto:Alissa.Thiele@k12.nd.us) by the listed due date in May 2022. If you have any questions regarding programming, course requirements, etc., please contact the program director for the applicable provider. Thank you and we look forward to serving your students and schools!

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PREPARING TODAYS STUDENTS  
FOR TOMORROWS EXPERIENCES

CRACTC/CREA ADMINISTRATION

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Additions or changes may be made based on  
enrollments received.  
Visit our website, [www.cractc.org](http://www.cractc.org), for updates.

CRACTC Teachers

Agriculture:  
Glen Huettl-Garrison  
Riston Zielke-Hebron  
Misty Steeke-Scranton

Aviation:  
Jeff Horan  
Brad Stangeland

Marketing:  
Michelle Hoff

Information Technology:  
Jason Horner  
Michelle Hoff

Health Science Careers:  
Joelean Lowman  
Blaine Steiner  
Lorie McCarthy  
Heather Frey  
Jessica Schafer  
Jessie Markovic

Family and Consumer Science:  
Kayla Koth

Graphic Arts:  
Kristy Horner

STEM - Tech. & Engineering:  
Tim Meyer  
Daphne Heid  
Brandon Lemer

# General Information

## CRACTC MISSION

CRACTC will provide Career and Technical Educational (CTE) opportunities to our member schools' students, in the most economical fashion, where every student has the same educational opportunity regardless of the size or location of the school.

*PREPARING TODAYS STUDENTS FOR TOMORROWS EXPERIENCES*

## CRACTC

The CRACTC is a "Virtual" Career and Technical Center established in 2008 as a partnership between the CREA –Central Regional Education Association and Bismarck Public Schools. The CREA is 1 of 7 Rural Educational Associations (REA's) in North Dakota. Initial funding for this program came from a grant from the North Dakota Legislature through the State Department of Career and Technical Education and from the memberships of 42 school districts with high schools that are members of the CREA; school districts who are not part of the CREA/CRACTC membership may also enroll in CRACTC courses (dependent upon availability) at a non-member rate.

## CRACTC STUDENTS

The CRACTC delivers CTE courses to students utilizing Interactive Television (ITV) and Online Virtual classroom environments. Our goal is to provide opportunities for students to enroll in courses to complete a program of study. **CTE concentrators (students that complete 2 or more credits in a program of study) can qualify for the \$6000 ND State CTE Scholarship Program.** See your high school counselor for details. This may include taking the "Work Keys" test to qualify.

## CRACTC CTE COURSES

CRACTC CTE courses will include hands-on and career exploration events that student participation is required. This may include required CPR and First Aid Certification days, industry tours, training and career exploration events such as training and deployment of "Real Care" babies, hands-on welding experience, etc... that are integral to the skill and knowledge development in these classes. It may also include optional activities such as participation in Career & Technical Student Organizations (CTSO's such as DECA, FFA, Skills USA, HOSA or TSA) or industry field trips. Most courses will have one event per semester, but courses such as welding may require more. Travel is the responsibility of the local school, with travel reimbursement available from the CRACTC if needed.

## REGISTRATION PROCEDURE

Registration forms and a copy of this guide are located on the CREA web page, [www.cractc.org](http://www.cractc.org). The registration form asks for basic student information that we need to enter into the CRACTC registration summary. Indicate the selected course name, course term and type along with the name, gender, and email address for each student. We ask that school districts notify CRACTC if any registered student needs accommodations as designated in an IEP and/or 504 plan. Additional information for our Powerschool site will also be requested prior to the start of school. Information needed includes: home address and primary phone number, race, ethnicity, and the names of the student's parents. This information can be downloaded from the local schools' Powerschool site and sent as a spreadsheet to [alissa.thiele@k12.nd.us](mailto:alissa.thiele@k12.nd.us).

CTE INTERNSHIPS – available by arrangement for each CTE program area.  
Grades: 11, 12     ½ Credit/Semester     Online + Placement

Prerequisite: CTE Concentrators that have completed at least 2 credits in a CTE program of study may be considered for Internships. Students may continue their education with on-the-job experiences through participation in a workplace internship. Students 18 years or older may be required to have a background check per facility employer policies. Transportation to training sites is the responsibility of the student. Application and interview with the CTE instructor and internship coordinator is required prior to registration.

## Deadline for Registration – April 22nd, 2022

### Lock-in date - May 6, 2022

After this time, substitutions and additions can be made but cancellations/drops will be charged the course enrollment student fee.

Student enrollment fees for CRACTC member schools:  
- \$250 per semester course     - \$500 for full year courses.

Student enrollment fees for Non-member schools:  
-\$400 per semester course     - \$800 for full year courses.

**Dual Credit:** Several CRACTC courses provide students the opportunity to earn Dual Credit, giving them a head-start on a postsecondary education. Dual Credit for eligible courses is optional. College admission application and fees are the responsibility of the student, home school and the student's parents or legal guardians. CRACTC Instructors will assist in the enrollment process. Courses may be eligible for tuition reduction and students who qualify for free or reduced lunches may be eligible for financial aid or grants through the Bank of ND. **Must be in 10th Grade and 16 years of age to enroll in dual credit courses.**

**Facilitators:** The CRACTC recognizes the importance of having a local facilitator for online courses. Instructors rely on the local facilitator to handle many of the daily needs that an instructor cannot address at a distance in the virtual environment. CRACTC provides reimbursement of 60% of up to a \$2000 stipend for one facilitator in each of our member schools (which could be a total reimbursement of \$1200). Schools may apply for reimbursement at the end of each semester.

**Grade Scale:** The CRACTC grade scale is; A = 92-100, B = 83-91, C = 74-82, D = 65-73, F = 64 and below. Dual Credit courses follow the providing college's grade scale. CRACTC grades are posted on the CRACTC powerschool. Grades are official at 9 am on the Monday following the end of each semester and then can be transferred to the home schools' powerschool. Dual credit courses will follow the grade scale of the applicable college/university.

**Powerschool:** Logins and passwords are provided to each student and school facilitator or local powerschool administrator. PowerSchool questions/issues should be directed to CRACTC Powerschool administrator, Alissa Thiele.

The CRACTC calendar can be found at [www.CRACTC.org](http://www.CRACTC.org)

**Withdrawal Policy:** During the first 10 days of a semester, any class that is dropped will not show up on a transcript. If a student withdraws from a class prior to the end of 12 weeks into a semester, the grade will be recorded as a W (withdrawal, no grade, no credit). If the student withdraws after the twelve weeks, the grade will be recorded as a WP (withdrawal pass, no credit) or WF (withdrawal fail), no credit, counted as an F and will count on the students GPA. Most courses offered for a full year – 1 credit - cannot be given ½ credit if the student drops the class at the end of the first semester.

## GRIEVANCE NONDISCRIMINATION AND ANTI-HARASSMENT

CRACTC follows Bismarck Public Schools policies and procedures associated with non-discrimination and anti-harassment situations. Please refer to the Bismarck Public School website for the most up-to-date non-discrimination and anti-harassment policy.

<https://sites.google.com/a/bismarckschools.org/schoolboard/system/app/pages/search?scope=search-site&q=non-discrimination>

Any CRACTC student, staff, or personnel who feels they are, or have been, discriminated or harassed during or within CRACTC course parameters (Online/ITV/face-to-face), contact your local school administrator to report the incident(s), with the local school administrator reporting to the CRACTC assistant director. The CRACTC assistant director will contact the BPS Title IX coordinator to begin the proper procedures and investigations in cooperation with the applicable local school administration. If the incident involves the local administrator, the applicable individual(s) shall directly contact the CRACTC assistant director. If the incident involves the CRACTC assistant director, contact the CRACTC director to begin the proper procedures.

**Grievance and Harassment Filing Procedure:**

<https://drive.google.com/file/d/0B4ZW3eBSjly6NWFEZ2dLdFkzRWs/view>. Please go to [www.CRACTC.org](http://www.CRACTC.org) for access to direct links listed above.

**IEP/504 STUDENTS**

The CRACTC strives to meet the needs of all students. Per the Federal Individuals with Disabilities Education Act (IDEA), CRACTC requests schools provide information regarding the needs/accommodations of registered students in order to provide them a positive and complete learning experience. Schools should indicate on their registration forms if any students has an Individualized Education Plan (IEP) or 504 Plan in which accommodations shall occur. CRACTC will contact the applicable school to request necessary paperwork for any registered student who is indicated to have such needs/accommodations.

**PLANS OF STUDY FOR STATE SCHOLARSHIPS**

ND resident students may apply for either the Career & Technical Education (CTE) or Academic Scholarships. Students utilizing CTE courses to meet the necessary requirements need to have two units of CTE credits from a coordinated plan of study recommended by the ND Department of Career & Technical Education and approved by the ND Superintendent of Public Instruction.

CRACTC has created the plan of study document, which is linked below, with regard to the courses we provide to help guide you through this process. If you have any questions regarding the document or course offerings, please contact Assistant Director Lyle Krueger at your convenience.

<https://www.cractc.org>



128 Soo Line Drive, Suite 102  
Bismarck, ND 58501  
[www.CRACTC.org](http://www.CRACTC.org)



806 N. Washington St.  
Bismarck, ND 58501  
[www.bismarckschools.org](http://www.bismarckschools.org)



BPS Career Academy  
1221 College Drive  
Bismarck, ND 58501  
[www.bismarckcte.org](http://www.bismarckcte.org)



128 Soo Line Drive, Suite 102  
Bismarck, ND 58501  
[www.creand.org](http://www.creand.org)

The Bismarck Public School District, CREA, and CRACTC do not discriminate on the basis of race, sex, national origin, religion, age or disability in admission or access to, or treatment or employment in, its program and activities. For further information, call 701.323.4000.

**AGRICULTURE**

**MECHANICS POWER SYSTEMS (01045)**

**Grade: 10-12    0.5 Credit    Fall or Spring Semester    Online + hands-on component**

This Mechanics course offers a study of the operation, maintenance, and repair of small gasoline engines. Instructional topics include but are not limited to the principles of operation of gasoline/diesel engines, tune-up and maintenance procedures, and disassembly, overhaul, and reassembly of gasoline small engines. Instruction may also include the operation of two and four-cycle engines commonly found on lawn mowers, snow blowers, rotary tillers, chainsaws, and other equipment. As time allows, other power systems could be covered. 20-25 hours of hands-on small engine lab experience is required for this course (required to attend to successfully complete the course). Students will meet at a selected facility for hands on supervised overhaul/repair and maintenance as a part of this class. Travel to the facility will be the responsibility of the local school.



**WELDING AND FABRICATION I (01046)**

**Grade: 10-12    0.5 Credit    Fall Semester    Online + Labs**

The Welding and Fabrication I curriculum is designed to develop student's understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate, and maintain a variety of welding equipment and related tools. Subject matter may include: Oxy-fuel cutting, heating and welding; Shielded metal arc welding; Gas metal arc welding and plasma arc cutting. Safety and metal fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. 20-25 hours of supervised hands-on welding lab instruction will be occur within the course (required to attend to successfully complete the course). Students will meet at a centrally located selected welding lab/facility for the hands-on supervised welding instruction part of this course. Travel to/from the facility will be the responsibility of the local school. Welding/Fabrication I is preferred but not required to enroll in Welding/Fabrication II.



**WELDING AND FABRICATION II (01046)**

**Grade: 10-12    0.5 Credit    Spring Semester    Online + hands-on component**

This curriculum is designed to develop student's understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate, and maintain a variety of welding equipment and related tools. Subject matter may include: Plasma cutter, CNC plasma cutter, TIG, aluminum MIG, metal turning lathe, shear/break/role, hydraulic "Ironworker", and plastic welder. Safety and metal fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. 20-25 hours of supervised hands-on welding lab instruction will be occur within the course (required to attend to successfully complete the course). Students will meet at a centrally located selected welding lab/facility for the hands-on supervised welding instruction part of this course. Travel to/from the facility will be the responsibility of the local school.

# AVIATION

## AVIATION I (17812)

Grade: 11, 12    1 Credit    Full Year    Online + hands-on component

This is the entry level course to prepare students for employment in the aviation industry. The course covers flight fundamentals, flight operations, aviation weather, performance and navigation. The course also explores careers in air traffic control, flight dispatching and airport management. Units of instruction include: safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics, weather patterns and hazards. Emphasis on applied academics in math and science are integrated throughout the curriculum along with decision-making principles as it applies to flight-related factors. **New updated curriculum starting fall 2022.**



## AVIATION II (17813)

Grade: 12    1 Credit    Full Year  
Online + hands-on component

**Prerequisite: Aviation I**

This course will cover advanced flight topics as well as expanding topics covered in Aviation I. It will also expand on career exploration based on student aviation interests such as pilot, mechanic, air traffic control, airport management, etc. An Introduction to Unmanned Aircraft Systems (UAS) will also be included. Students will be preparing to pass the Federal Aviation Administration (FAA) private pilot written exam. **New updated curriculum starting fall 2022.**

## NEW! UNMANNED AIRCRAFT SYSTEMS (DRONES) (17184)

Grade: 10-12    1 Credit    Full Year    Online + hands-on component

**Prerequisite: Aviation I**

The Unmanned Aircraft Systems course will teach students a basic understanding of recreational and commercial unmanned aircraft operations and prepares them for their Part 107 Remote Pilot Certification. They will identify the responsibility and authority of being a remote Pilot In Command, discuss rules of UAS operation, understand how UAS operate in airspace defined within the National Airspace System. Identify special-use airspace where UAS usage may be prohibited. Understand weather and how it affects flight of UAS. Understand general loading and performance data, airport operations. When students complete this course, they will have a general understanding and knowledge of the operation and uses of UAS as they pertain to the world of Aviation along with industry applications.

# FAMILY AND CONSUMER SCIENCE

## FAMILY AND CONSUMER SCIENCE I (09022)

Grade: 9 - 12    0.5 - 1 Credit    Fall/Spring/Full Year    Online + hands-on component

This exploratory course is highly recommended for students as an introduction to the other Family and Consumer Science (FACS) courses offered; especially 9th grade students. Students will learn about necessary everyday life skills they can use today and in their future. It includes basic information and discussion on each topic of FACS. Main concepts provided throughout the course will include the basic understanding of the purpose of family and care of children, dating and teen parenting, communication and goals, nutrition and wellness, personal finance, and clothing care and construction. Hands-on projects during the course may include: cross-stitching, hand sewing, balancing finances, and food prep and nutrition.



## INDEPENDENT LIVING (09025)

Grade: 10 – 12 0.5 Credit    Fall or Spring Semester    Online + hands-on component

For a student who is looking forward to being on his/ her own, taking this course will help you avoid some common problems. Finding and keeping a job you enjoy, handling your money wisely, securing housing, choosing a roommate, making healthy food decisions, and maintaining your personal possessions are topics covered in this class.

## CHILD DEVELOPMENT (09026)

Grade: 10 - 12    0.5 Credit    Spring Semester  
Online + hands-on component

Popular among students who want to learn more about children. This is a great class for anyone who expects to become a parent or plans to work with children. Students will put into practice what child development experts know will help children be happy, stay safe, and reach their full potential. Students will get an opportunity to practice caring for a child by taking home a RealCare baby for a period of 2-4 days.



## PARENTING (09130)

Grade: 10 – 12    0.5 Credit    Fall Semester  
Online+Learning Days

Designed for both males and females, this course will prepare you for what is probably the most important job you will ever have, that of being a parent. This course will help you develop positive attitudes, realistic expectations and effective skills for parenting. Pregnancy, parenting roles of fathers and mothers, financial impact of a child and other parenting concerns are emphasized in this class. You will get to practice being a parent by taking home a “RealCare” baby for a period of 2-4 days.

**FAMILY LIVING (09132)**

**Grade: 10 – 12    0.5 Credit    Spring Semester    Online + hands-on component**

Every one of us is a part of a family and each family is different. Many students will be forming their own new families before too long. This course is about how families function and how they have changed over time. The value of healthy families, not only to the individual family members but to society as a whole, is the primary focus of this class. Learn what contributes to a stable and meaningful family. Students may care for a “RealCare” baby for a period of 2-4 days.



**HOUSING AND INTERIOR DESIGN (09133)**

**Grade: 10 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

The learning experiences in this course are planned to help the students recognize family needs and values as they pertain to housing. Students will evaluate factors for selecting and financing housing, furnishings and appliances. The “design your dream home” final project is a way for students to use their learned knowledge of color, furnishings and design. Other topics covered are floor plans, historic housing styles, and housing related careers. The course utilizes exciting, yet time intensive project-based curriculum. Schools and/or students will need to purchase additional materials/supplies for enrolled students in this course (approx. cost per student: \$30-50).

**EXPLORING THE TEACHING PROFESSION (09041)**

**Grade: 11 - 12    1 Credit    Full Year    Online + hands-on component**



Have you had a teacher make a positive impact on your life? Have you ever thought about possibly becoming a teacher yourself? The Exploring the Teaching Profession course will give students who are interested in becoming teachers a running start into the profession. The course will expose students to, and provide first-hand experiences in the duties of a teacher including, classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education. Schools and/or students will need to purchase additional materials/supplies for enrolled students in this course. (approx. cost per student: \$30-50)  
**\*Coordination with local school administrators and teachers to complete local clinical hours is required.**  
**\*\*Student transportation may be required to complete clinical hours if the school district has multiple buildings throughout your community.**

**GRAPHIC ARTS**

**GRAPHIC DESIGN AND PHOTOGRAPHY I (17072)**

**Grade: 10 - 12    1 Credit    Full Year    Online + hands-on component**

This course will introduce students to the skills needed in graphic design. Students will be exposed to photography, scanning, the elements and principles of design, effective thumb-nailing and typography. This course will address how artwork and photographic images can be used in commercial design. Students will create a digital portfolio for their artwork and they will be introduced to the following Adobe Creative Cloud Software: InDesign, Photoshop and Illustrator. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Content Standards for introduction to Graphic Communications and Advertising Design.

**GRAPHIC DESIGN AND PHOTOGRAPHY II (17073)**

**Grade: 11, 12    1 Credit    Full Year**

**Online + hands-on component**

**Prerequisite: Graphic Design and Photography I**

This course will build on the skills needed in graphic design and introduce students to potential careers, college and training opportunities for graphic designers. They will receive more advanced training in the following Adobe Creative Cloud Software: InDesign, Photoshop and Illustrator. They will continue to refine and develop their digital portfolio. The students will create artwork and photographic images that can be used as logos, artwork for t-shirts and other promotional materials. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Content Standards for introduction to Graphic Communications and Advertising Design.



# HEALTH SCIENCE CAREERS

## MEDICAL CAREERS (07033)

Grade: 10 - 12    1 Credit    Full Year    Online/ITV - 1st period 8:30; or 2nd period – 9:25 + hands-on component

This year-long course provides students with information relating to the educational and professional requirements for the various medical careers. Students will also study the fundamentals of disease transmission and prevention, basic anatomy and physiology, and medical terminology. Students will complete CPR/AED for the Professional Rescuer and American HeartSaver First Aid. Two hands-on learning experiences are required and may necessitate travel to an alternate location. Additionally, there is an optional field trip to explore health science at ND college/universities. Students must successfully complete both semesters of this class including First Aid & CPR/AED Certification for Healthcare Providers. This course and the required certifications are the prerequisite to all other Health Science courses and is offered either on-line or via interactive television.

## ADVANCED MEDICAL CAREERS (07035)

Grade: 11, 12    1 Credit    Full Year  
Online + hands-on component  
**Prerequisite: Medical Careers**

This course will expand on the knowledge gained in Medical Careers. Students will have the opportunity to explore various medical careers through research, professional guest speakers, college tours and potential job shadows. The curriculum is designed to enhance student employability skills and professional medical career readiness. Requirements for job shadowing: up to date vaccinations, including influenza and TB test are required per hospital/clinics/other healthcare facility policies. All students must have a background check. The school/student is responsible for necessary vaccinations and transportation to clinical sites. \*School/student may be responsible for additional course fees including name tag/polo shirt for tours/job shadows, and/or additional registration fees per hospital/clinic job shadow policies/expectations; approximate cost \$35/student.



## MEDICAL TERMINOLOGY (07036)

Grade: 10 - 12    0.5 Credit    Fall or Spring Semester  
Online + hands-on component

**Dual Credit is available through Bismarck State College. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.** In this course, students will develop skills necessary for decoding of commonly used medical terms including the meaning of medical suffixes, prefixes and word roots. Students will learn terminology associated with body systems, diseases and disorders of those systems. Students will be also be expected to use correct spelling and pronunciation of medical terms they have learned and will learn commonly used medical abbreviations. \*Course is provided through BSC Blackboard LMS

## EMERGENCY MEDICAL RESPONDERS (07045)

Grade: 11, 12    1 Credit    Full Year    Online + hands-on component  
**Prerequisite: Medical Careers I including First Aid & CPR/AED Certification is required.**

This introductory course prepares students to respond to a wide range of emergencies such as heart attacks, auto accidents and diabetic problems. The units of instruction include, EMS systems, workforce safety, medical, legal and ethical issues, communications and documentation, the human body, airway management, patient assessment, medical emergencies, trauma, special patient populations and EMS operations. On completion of the EMR course students will be better prepared to work with local EMT's to complete requirements for state EMR testing. *Students will not be completing clinical ride-along's in ambulances with EMT squads as a requirement in this course. Students who are 16yrs old or older, and interested in taking the EMR state exam, will need to coordinate with local EMT squads in your community or region to complete the required clinical hours to meet the requirements to take that exam.*



## INTRODUCTION TO NURSING ASSISTANT (07031)

Grade: 10 - 12    0.5 Credit    Fall Semester    ITV - 4th period Tuesdays and Thursdays / Online Monday, Wednesday, Friday + hands-on component  
**Prerequisite: Medical Careers I including First Aid & CPR/AED Certification is required.**

This Introduction to Nursing Assistant Training program offers classroom instruction and the necessary skills practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This course does not require supervised clinical practice hours, but will provide necessary curriculum and supervised skills training to challenge the state CNA board exam provided by the North Dakota Board of Nursing to become a certified CNA. *Assistance will be provided for interested students in coordinating with local healthcare facilities for clinical experiences if desired; not required to complete this course.*



# INFORMATION TECHNOLOGY

## INTRODUCTION TO INFORMATION TECHNOLOGY (27101)

**Grades: 9 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

This exploratory level course provides an exposure to careers and issues in Information Technology. Units prepare students for the industry recognized “Internet and Computing Core Certification” (IC3). This globally recognized certification provides students with the foundation of knowledge needed to excel in fields that involve computers and the Internet. The IC3 Global Standard 3 reflects the most relevant skills for school and business today including: Computing Fundamentals, Key Applications, and Living Online.

## IT ESSENTIALS – PC HARDWARE & OPERATING SYSTEMS (27219)

**Grade: 9 - 12    0.5 Credit    Spring Semester    Online + hands-on component**  
**Prerequisite – Introduction to Information Technology**

**Dual Credit is available through BSC. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.** This course presents exposure to computer hardware and operating systems. Students learn how hardware and software components work as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to physically take apart, assemble, and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included. This course prepares students for Comp TIA’s “A+” certification and/or Comp TIA’s “IT Fundamentals” certification exams.



## CYBERSECURITY (27280)

**Grade: 10 - 12    0.5 - 1 Credit    Fall/Spring/Full Year    Online + hands-on component**

As our world becomes increasingly dependent on technology, cybersecurity is a topic of growing importance. It is crucial that individuals and industry take precautions to protect themselves from the growing threat of cyber-attacks. **The fall semester** of this course prepares students with beginning knowledge and crucial skills to be responsible citizens in a digital future. Students will learn foundational cybersecurity topics including digital citizenship and cyber-hygiene, the basics of writing and solving codes, software security, networking fundamentals, and basic system administration. Although this is not a coding-intensive course, students will learn basic SQL, and will utilize basic HTML and JavaScript within specific contexts and will be provided supports within those contexts. Students will complete virtual projects at the end of each module. **The spring semester** will introduce students to best practices businesses use to protect their information as well as techniques individuals can use to protect themselves using social media. Identification of cybercrime, security principles, technologies and security principles to defend industry networks will be covered. A culminating course project where they will complete a simulated cybersecurity hacking experience will occur to build skills and knowledge for students to pursue careers in cybersecurity. **Dual credit is available through BSC – FOR SPRING SEMSTER ONLY. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.**

## INTRODUCTION TO NETWORKING (27265)

**Grades: 9 - 12    0.5 Credit    Fall or Spring Semester    Online + hands-on component**

This course teaches the basics of networking. It covers how network devices work together, network addressing and services, how to build a home network and design basic security, the basics of configuring Cisco devices, as well as testing and troubleshooting network problems.

## NEW! INTRO TO PROGRAMMING (27120)

**Grade: 9 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

This course is designed as an introduction to programming and programming languages such as Python, Java, JavaScript and C++ commonly used in IT careers in industry today. This course will provide students who have no or very little programming knowledge and experience a solid foundation that could be used as a preparation for more advanced programming courses. If you have little or no experience in coding or programming, but have some interest in it, this is the perfect starting course for you!

## NEW! INTRO TO VIDEO GAME DESIGN (27130)

**Grade: 9 - 12    0.5 Credit    Spring Semester    Online + hands-on component**

This course introduces basic video game development using an introductory, web-based coding program called Scratch. Students will build basic coding or computer science skills and a fundamental understanding of game programming. Learners will build beginning pieces of introductory level video games by engaging in the overall design process, controls, event-driven programming, and debugging of a program. This course is designed for beginners with little to no experience in programming and is strongly recommended as a second semester course after Intro to Programming and before Video Game Design.



## CODING WITH JAVA (27125)

**Grade: 10 - 12    0.5 Credit    Spring Semester    Online + hands-on component**

This course will provide students with a solid base for understanding the main concepts of programming languages. Students will be introduced to the JAVA programming language and complete projects utilizing programming concepts, variables, constants, decision structures and looping structures.

## CODING WITH PYTHON – (27123)

**Grade: 10 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

**Dual credit is available through BSC. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.** This course is an online application-based course in computer programming using Python language; the fastest growing computer language in the world today. The students will develop good problem solving and programming skills while performing several hands-on labs and assignments including gaming. Topics covered include; procedures, mathematical and business functions, arrays and structures, color, sound, and graphics, creating classes, using files, sorting and searching.

## VIDEO GAME DESIGN (27131)

**Grade: 10 - 12    1 Credit    Full Year    Online + hands-on component**

**\*Completion of Intro to Video Gaming Design, Coding w/ PYTHON and/or JAVA is STRONGLY RECOMMENDED. This is an upper level coding class.**

The course is an upper level coding course that teaches the foundations of creating and designing video games in JavaScript. The course utilizes a blended classroom approach. The content is fully web-based, with student’s writing and running code on-line with teachers utilizing other tools and resources such as on-line videoconferencing to give focused 1-on-1 attention to students. Each unit of the course is broken down into lessons consisting of various resources, example programs to explore, and written programming exercises, adding up to over 100 hours of hands-on video game programming practice in total.

# MARKETING

Students have the opportunity to participate in DECA through Bismarck Public Schools CRACTC group.

## MARKETING (04210)

Grade: 10 - 12    1 Credit    Full Year    Online + hands-on component

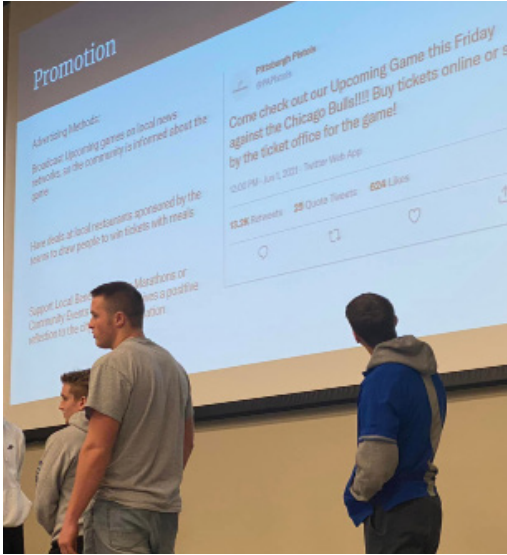
This course develops student understanding and skills in such areas as channel management, marketing- information management, market planning, pricing, product/service management, promotion, and selling. Focus will be on the marketing mix, including products, promotion, pricing, and distribution. Through the use of projects and on-line simulations, students acquire an understanding and appreciation of marketing activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented problem-solving situations for which they must apply academic and critical-thinking skills.

## PRINCIPLES OF FINANCE (04081)

Grades 9 - 12    0.5 credit    Fall Semester

Online + hands-on component

Principles of Finance expands student understanding of finance. Students develop their knowledge and skills in such areas as business law, communication skills, compliance, customer relations, economics, financial analysis, financial-information management, human resources management, marketing, professional development, and selling. Emphasis is placed on the analysis and purchase of securities and investments, as well as the need for effective customer relationship management and information management in finance. Principles of Finance is an entry level course in The Business Administration Program of Study for Marketing Education.



## SPORTS AND ENTERTAINMENT MARKETING (04240)

Grade: 10 - 12    0.5 Credit    Fall Semester    Online + hands-on component

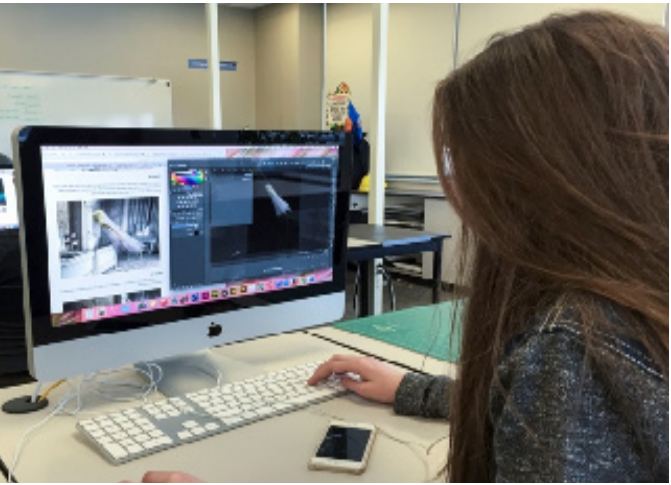


This course introduces students to marketing occupations in the area of sports and entertainment. Take a look at the exciting and dynamic field of sports and entertainment marketing. One of the largest industries in the world, sport marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment, and 2) The marketing of non-sports products and services through sports. You will discover why companies pay to be associated with a team or entertainer; how to develop ticket plans to fill the seats in the arena; why targeting your marketing efforts is so important; and more.

## SOCIAL MEDIA MARKETING (04235)

Grades 9 - 12    0.5 credit    Spring Semester    Online + hands-on component

Social Media Marketing presents the use of on-line social networking as a business strategy designed to increase customer loyalty and inquiry conversion. Students will study major social media channels and marketing campaign techniques, and evaluate contemporary and emerging tools in the digital marketplace including social bookmarking and techniques to drive social media traffic. Analyses of social media effectiveness will also be explored. Social Media Marketing is an entry level course in The Business Administration Program of Study for Marketing Education.



## PRINCIPLES OF ENTREPRENEURSHIP (04110)

Grades 9 - 12    0.5 credit    Spring Semester

Online + hands-on component

Have you ever thought of owning your own business? This is a marketing course that introduces students to a wide array of entrepreneurial concepts and skills. Students will develop an appreciation for marketing's role in the development and success of a new business. Students conduct thorough market planning for their ventures: selecting target markets; conducting market, SWOT, and competitive analyses; forecasting sales; setting marketing goals and objectives; selecting marketing metrics; and setting a marketing budget. The capstone activity in the course is the development of detailed marketing plans for students' start-up businesses.

# TECHNOLOGY & ENGINEERING

**\*\*Math and Science credit options are available for STEM I and II. Math and Science credit options are not CTE credits and are not accepted toward the state CTE Scholarship.**

## STEM SEMINAR I

This course can be coded as Tech Ed credit (10610), \*\*Science credit (13150), or \*\*Math credit (11170).

Grades: 9 - 12    0.5 Credit    Fall Semester    Online + hands-on component

This is a project-based course in which students use Science, Technology, Engineering and Math to solve real world problems. Students will design projects such as bridges, assistive-reach devices, parachutes, etc. Students will use common, everyday materials to design prototypes of products that help people in the real world. STEM focuses on the basics of the Engineering Design Process. STEM careers will also be explored. There are no textbooks, quizzes, or tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. \*Schools will be required to purchase applicable course materials (approximately \$15 or less per student).

## STEM SEMINAR II

*This course can be coded as Tech Ed credit (10610), \*\*Science credit (13150), or \*\*Math credit (11170).*

**Grades: 9 - 12    0.5 Credit    Spring Semester**  
**Online + hands-on component**

Students will explore concepts such as energy, power, and agricultural engineering. STEM careers will also be explored. There are no textbooks, quizzes, or tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. \*Schools will be required to purchase applicable course materials (approximately \$15 or less per student).



## FOUNDATIONS OF ENGINEERING & TECHNOLOGY (10094)

**Grades: 9 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

**Prerequisite: STEM SEMINAR I or II**

Would you prefer to learn by doing? Do you like to build things? In this class, students will complete design challenges while researching better solutions, designing 3D models and actual models, testing and evaluating products. Some possible hand's-on projects include developing and designing a wind turbine, solar car, CO2 dragster, a mousetrap car, and a glider. This course consists of two separate learning units, each nine weeks in length: Energy and Power Technologies and Transportation Technologies. STEM careers and safety will also be explored. \*Schools will be required to purchase applicable course materials (approximately \$35 or less per student). \*\*Additional course material and supplies include items such as saws, drills, etc. to complete projects.



## FOUNDATIONS OF ENGINEERING AND TECHNOLOGY II (10094)

**Grades: 9 - 12    0.5 Credit    Spring Semester**  
**Online + hands-on component**

**Prerequisite: Foundation of Engineering I**

In this class, students will complete design challenges while researching better solutions, designing 3D models and actual models, testing and evaluating products. Some possible hand's-on projects include developing and designing a bridge, a survival shelter, a prosthetic arm, a robot and a rocket. This course consists of two separate learning units, each nine weeks in length: Manufacturing Technologies and Construction Technologies. STEM careers and safety will also be explored.

\*Schools will be required to purchase applicable course materials (approximately \$35 or less per student).

\*\*Additional course material and supplies include items such as saws, drills, etc.. to complete projects.

# GNWACTC

**GREAT NORTHWEST AREA  
CAREER AND TECHNICAL CENTER**



## GNWACTC ADMINISTRATION

### Kim Murphy

GNWACTC Director  
Office: 701-609-5681 ext. 8  
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### Alissa Thiele

Powerschool Registrar & Marketing Coordinator  
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## Governing Board

Lashell Tjelde – Alexander  
Stephanie Riestad – Divide County  
Rick Foss – Grenora  
Nichollette Lahtinen – New Town  
Benjee Foss – Ray  
Michell Hoff – Parshall  
Mark Schmidt – Tioga  
Shane Aadnes – Stanley  
Pam Ramage – Watford City  
Heather Wheeler – Williston

Additions or changes may be made based on enrollments received.  
Visit our website, <https://www.livebinders.com/play/play?id=2335653>, for updates.

# General Information

## Registration lock-in Date:

**May 6, 2022:** After this time, substitutions and additions can be made but cancellations/drops will be charged the course enrollment student fee.  
Enrollment Cost: \$300 per semester course - \$600 per full year course.

## Drop/Payback Policy:

It is recommended that each school has a policy in place for a student to pay the school back if he/she decides to drop after the registration lock-in date.

## Dual Credit:

There are some courses that are offered Dual Credit. If the instructor is a College instructor from WSC, the course must be taken for dual credit. However, if the instructor of the dual credit course is not a WSC instructor, the student may choose to pay the fees and fill out the paper work for the dual credit. The current cost at WSC is approximately \$90 per credit. Kim Wray 701-774-4500 or Brittney O'Neill 774-4202 in the extended learning department at Williston State College are your contacts. They have even offered to come to your High School to help enroll students. Your student(s) should start this enrollment process right away!

## Site Facilitators:

It is beneficial to have facilitators at each receiving school location. Instructors from the sending school rely on the local facilitator to handle many of the daily needs of classes. Please, do your best to have someone in the room during class at all times, however, it is necessary to have someone as a "go to" person for the sending instructor to communicate with (especially in case of an emergency).

## Grade Scale:

Any grades or midterm reports that are needed by the receiving site(s) should be sent to the site facilitator upon request. Each of the school districts involved have different procedures for grading. For this reason, communication between the sending teacher and the remote site facilitator is necessary. The receiving school will follow the teacher's intent, in regard to the grade placed on the report card. For example, if a 72 is an F on the scale that the teacher uses, it must be converted to a corresponding F at the remote site (even if 70 is the passing percentage at the receiving site).

## Class Size:

Each class is different by the nature of the content and the way it is delivered (ex: ITV, online, etc). The minimum for MOST classes is 7 and the maximum is 28, unless otherwise stated in the catalog/schedule.

## Withdrawal Policy:

This will be left up to each school's, individual policy.

# AGRICULTURE EDUCATION

## LIVESTOCK PRODUCTION (01061)

**Grade: 10 - 12   0.5 Credit   Fall Semester   Online**

An introduction to the general fundamentals of livestock management and industry practices in food/farm animal production. Class room lecture is to be complimented by the accompanying labs, which will provide hands on tours of livestock operations to enhance student knowledge of livestock production. ***Dual Credit is Available through Williston State College ANSC 114. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition)***

## EQUINE NUTRITION (01034)

**Grade: 10 - 12   0.5 Credit   Fall Semester   Online/**

This course focuses on basic equine nutrition throughout the various stages of equine development and performance. These concerpts will be integrated with the practical applicaiton of equine feeding. ***Dual Credit is available through Williston State College ANSC 160. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition)***

## INTODUCTION TO ANIMAL SCIENCE (01062)

**Grade: 10 - 12   0.5 Credit   Fall Semester   Online**

This course will cover general principles of the livestock industry and it's relationship to mankind. ***Dual Credit is available through Williston State College ANSC 114. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition)***

## FARM AND RANCH MANAGEMENT (01032)

**Grade: 10 - 12   0.5 Credit   Spring Semester   Online**

Are you interested in learning how to run a business in our states #1 industry? This course will teach you the basics of how to run a farm, ranch and other agribusinesses. Topics will include recordkeeping, taxes, commodity marketing, CDL, farm equipment maintenance, and livestock & crop production.

## VETERINARY SCIENCE (01067)

**Grade: 11 - 12   0.5 Credit   Spring Semester   Online**

Animals! The Veterinary Science course will introduce you to various species of animals, proper care and management of those animals, and to basic animal medical tasks and procedures.

**WELDING AND FABRICATION I (01046)**  
**Grade: 10-12   0.5 Credit   Fall Semester   Online with hands-on component**

The Welding and Fabrication I curriculum is designed to develop student’s understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate, and maintain a variety of welding equipment and related tools. Subject matter may include: Oxy-fuel cutting, heating and welding; Shielded metal arc welding; Gas metal arc welding and plasma arc cutting. Safety and metal fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. 20-25 hours of supervised hands-on welding lab instruction will be occur within the course (required to attend to successfully complete the course). *Students will meet at a centrally located selected welding lab/facility for the hands-on supervised welding instruction part of this course. Travel to/from the facility will be the responsibility of the local school.*

**WELDING AND FABRICATION II (01046)**  
**Grade: 10-12   0.5 Credit   Spring Semester**  
**Online with hands-on component**

*Welding/Fabrication I is preferred but not required to enroll in Welding/Fabrication II.* This curriculum is designed to develop student’s understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate, and maintain a variety of welding equipment and related tools. Subject matter may include: Plasma cutter, CNC plasma cutter, TIG, aluminum MIG, metal turning lathe, shear/break/role, hydraulic “Ironworker”, and plastic welder. Safety and metal fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. 20-25 hours of supervised hands-on welding lab instruction will be occur within the course (required to attend to successfully complete the course). *Students will meet at a centrally located selected welding lab/facility for the hands-on supervised welding instruction part of this course. Travel to/from the facility will be the responsibility of the local school.*



**MECHANICS POWER SYSTEMS (01045)**  
**Grade: 10-12   0.5 Credit   Fall or Spring Semester   Online with hands-on component**

This Mechanics course offers a study of the operation, maintenance, and repair of small gasoline engines. Instructional topics include but are not limited to the principles of operation of gasoline/diesel engines, tune-up and maintenance procedures, and disassembly, overhaul, and reassembly of gasoline small engines. Instruction may also include the operation of two and four-cycle engines commonly found on lawn mowers, snow blowers, rotary tillers, chainsaws, and other equipment. As time allows, other power systems could be covered. 20-25 hours of hands-on small engine lab experience is required for this course (required to attend to successfully complete the course). *Students will meet at a selected facility for hands on supervised overhaul/repair and maintenance as a part of this class. Travel to the facility will be the responsibility of the local school.*

**HEALTH SCIENCE**

**NURSING ASSISTANT (07032)**  
**Grade: 11 - 12   0.5 Credit   Fall or Spring Semester   Online + 3 to 4 full days of hands-on practical learning at TrainND in Williston, ND.**

The Nursing Assistant Training program offers classroom instruction and clinical practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This program includes supervised practical training and clinical practice of skills necessary to work in a long term care facility. Skills would include but are not limited to learning to taking vitals signs, bathing, feeding, and transferring residents in the facility. Students also have the opportunity to take the state CNA board exam to acquire state certification. *There will be 3 to 4 full days of hands on practical learning at TrainND in Williston, ND. The schools are responsible to get their students to these days.*

**INTRO TO HEALTH CAREERS (037080)**  
**Grade: 9 - 12   0.5 Credit   Fall or Spring Semester**  
**Online**

The Career Cluster for Health Careers encompasses planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development. It will provide an introduction to health careers through an examination of occupations within the health sciences industry



**MEDICAL CAREERS I (07033)**  
**Grade: 10 - 12   1 Credit   Full Year   ITV**

The Medical Careers course will introduce students to a wide variety of health care fields as well as core knowledge & skills necessary for entry level employment in a variety of health care environments. Basic medical terminology, anatomy & related diseases/disorders, professional standards, safety, vital signs, monitoring body functions, disease prevention, as well as CPR/First Aid, & a basic introduction to a variety of health careers will be provided in this course. Certifications obtained will include Heartsaver CPR/First Aid & Stop the Bleed.

**SPORTS MEDICINE PREVENTION AND CARE (07034)**  
**Grade: 10 - 12   1 Credit   Full Year   ITV**

Through theory, classroom engagement, and hands-on learning, students will become familiar with an introduction to the concepts relevant to sports medicine. Students will learn to: prevent, recognize, treat, and evaluate immediate care of athletic injuries; professional standards (i.e. professionalism & confidentiality-HIPAA), as well as some basic employability skills; basic anatomy & physiology in relation to subject matter as well as some pathologies in relation to subject matter; some hands-on-activities will include basics of taping/wrapping/bracing & first aid/CPR/AED. Certifications obtained will include Heartsaver CPR/First Aid & a variety of certifications through National Federation of State High School Associations (NFHS).

**ADVANCED MEDICAL CAREERS (07035)**  
**Grade: 11, 12    1 Credit    Full Year    ITV**  
**Prerequisite: Medical Careers I**

This course will expand on the knowledge gained in Medical Careers I. Students will have the opportunity to explore various medical careers through research, professional guest speakers, (potential) college tours, and (potential) job shadows. The curriculum is designed to enhance student employability skills and professional medical career readiness. If job shadowing can be organized with each site and is possible, up to date vaccinations including influenza and a TB test are required per facility policy as is a current Healthcare Provider CPR/AED certification. (Refresher course will be offered.) Students 18 years or older must have a background check. The student is responsible for necessary vaccinations, and transportation to clinical sites.

**MEDICAL TERMINOLOGY (07036)**  
**Grade: 10 - 12    0.5 Credit    Fall or Spring Semester    Online + hands-on component**

This online course is offered as a dual college credit through Williston State College. In this online course, students will develop skills necessary for decoding commonly used medical terms. Students will learn the meaning of prefixes, suffixes, & word roots. This medical terminology course covers the basic knowledge & understanding of medical language & terminology used by healthcare professionals. This course requires a lot of independent work & utilizing good time management. ***Dual Credit is available through Williston State College. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**INTRODUCTION TO EMERGENCY MEDICAL RESPONDERS (07044)**  
**Grade: 11, 12    1 Credit    Full Year    ITV**

This introductory course prepares students to respond to a wide range of emergencies such as heart attacks, auto accidents and diabetic problems. The units of instruction include, EMS systems, workforce safety, medical, legal and ethical issues, communications and documentation, the human body, airway management, patient assessment, medical emergencies, trauma, special patient populations and EMS operations. On completion of the EMR course students will be better prepared to work with local EMT's to complete requirements for state EMR testing. *Students will not be completing clinical ride-along's in ambulances with EMT squads as a requirement in this course. Students who are 16yrs old or older, and interested in taking the EMR state exam, will need to coordinate with local EMT squads in your community or region to complete the required clinical hours to meet the requirements to take that exam.*

**INFORMATION TECHNOLOGY**  
**CCNA INTRODUCTION TO NETWORKS (27266)**  
**Grade: 10 - 12    0.5 Credit    Fall Semester    Online + hands-on component**

This course teaches students the skills needed to obtain entry-level home network installer jobs. It also helps students develop some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. It provides a hands-on introduction to networking and the Internet using tools and hardware commonly found in home and small business environments. Instructors are encouraged to facilitate field trips and outside-the-classroom learning experiences. Labs include PC installation, Internet connectivity, wireless connectivity, file and print sharing, and the installation of game consoles, scanners, and cameras. ***Dual Credit through Williston State College CIS 164. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**CCNA NETWORK FUNDAMENTALS II (27267)**  
**Grade: 10 - 12    0.5 Credit    Fall Semester    Online with hands-on component**  
**Prerequisite: Introduction to Networks is required.**

This course prepares students for jobs as network technicians and helps them develop additional skills required for computer technicians and help desk technicians. It provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and the final chapter helps them prepare for the CCENT certification exam. Network monitoring and basic troubleshooting skills are taught in context. ***Dual Credit through Williston State College CIS 165. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**MICROCOMPUTER HARDWARE I (27219)**  
**Grade: 10 - 12    0.5 Credit    Fall Semester    Online with hands-on component**

Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. The students, through hands-on activities and labs will: learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition this course helps students prepare for the CompTIA A+ certification. ***Dual Credit through Williston State College CIS 128. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**MICROCOMPUTER HARDWARE II (27220)**  
**Grade: 10 - 12    0.5 Credit    Spring Semester    Online with hands-on component**  
**Prerequisite: MicroComputer Hardware I is required.**

Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. The students, through hands-on activities and labs will: learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, this course helps students prepare for the CompTIA A+ certification. ***Dual Credit through Williston State College CIS 129. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**INTRODUCTION TO CYBERSECURITY (27280)**

**Grade: 10 - 12    0.5 Credit    Fall Semester    Online with hands-on component**

Introduction to Cybersecurity is designed to provide students the basic concepts and terminology of cybersecurity. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, application of cybersecurity practices and devices, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization’s information, and a broad range of other topics. ***Dual Credit through Williston State College CSCI 141. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**AVIATION**

**AVIATION TECHNOLOGY I (17812)**

**Grade: 10 - 12    1 Credit    Full Year    Online with hands-on component**

This is the entry level course to prepare students for employment in the aviation industry. The course covers fundamentals of flight, flight operations, aviation weather, performance, and navigation. The course also explores careers in air traffic control, flight dispatching and airport management. Units of instruction include safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics, weather patterns and hazards. Emphasis on applied academics in math and science are integrated throughout the curriculum along with decision-making principles as it applies to flight-related factors.

**WELDING**

**WELDING TECHNOLOGY I (17812)**

**Grade: 10 - 12    1 Credit    Full Year    ITV - 3rd period with hands-on component**

***\*This course is offered through North Valley Career and Technical Center.***

Students learn the various welding processes: Oxy-Fuel weld and cutting, Shielded metal arc weld (Stick), Gas metal arc weld and Flux core arc weld (wire feed), Gas tungsten arc weld (Tig), Plasma arc cutting, and Air arc gouging. General shop safety and theory of each weld process along with blueprint reading, weld symbols, weld joints and positions, and properties of metals are studied. Students completing required standards will be eligible to test for A.W.S. entry level weld certification.

**TRADE AND INDUSTRIAL EDUCATION**

**EXPLORATION OF OIL INDUSTRY CAREERS (17410)**

**Grade: 10 - 12    0.5 Credit    Fall or Spring Semester    Online with hands-on component**

An introduction to the various aspects of petroleum industry including equipment, systems, instrumentation, operations, and the various scientific principles. Addresses a variety of petroleum technologies: exploration, drilling, production, transportation, marketing, and chemical processing industries. ***Dual Credit through Williston State College PTLO 101. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**ELECTRONICS TECHNOLOGY I (17150)**

**Grade: 10 - 12    0.5 Credit    Fall Semester    Online + 4 labs**

Electronics Technology I will provide students with a working knowledge of Direct Current (DC) and Alternation Current (AC) theory and application. Integrated math and physic concepts will be provided to support the understanding of DC and AC circuitry. Fundamentals of direct current circuit and alternating current circuit operations including a study of Ohm’s and Kirchhoff’s laws. Investigate series, parallel and series/parallel resistive networks, transformers, circuit resonance, phasors, and capacitive/inductive circuit analysis techniques. Power distribution, metering, loading, and electricity for industry topics will be introduced. ***Dual Credit through Williston State College TECH 103. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

**ELECTRONICS TECHNOLOGY II (17150)**

**Grade: 10 - 12    0.5 Credit    Spring Semester    Online + 4 labs**

**Prerequisite: Electronics Technology I**

An entry level course in digital electronics to include analysis of numbering systems, logic gates, Boolean algebra, combinational logic, clocking and timing circuits reinforced with laboratory exercises. Basic encoding, decoding, controlling, multiplexing and de-multiplexing will be covered. Troubleshooting techniques of various digital circuits using schematic diagrams will be introduced. ***Dual Credit through Williston State College TECH 105. (Dual Credit ONLY; student must fill out application before class starts and GNWACTC will pay fees and tuition). Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***



## ROUGH RIDER AREA CAREER & TECHNOLOGY CENTER

The Mission of Career and Technical Education is to work with others to provide North Dakota citizens with the technical skills, knowledge, and attitudes necessary for successful performance in a globally competitive workplace.

### RACTC ADMINISTRATION

#### RACTC Director

To Be Announced

#### Alissa Thiele

WesternND CTC Powerschool Registrar  
and Marketing Coordinator  
Office: 701-337-6871  
Alissa.Thiele@k12.nd.us

Additions or changes may be made  
based on enrollments received.

Visit our website,  
<http://ractc.weebly.com/>, for updates.

### Governing Board

Lucas Greff (Mott-Regent) - President  
Terry Johnson (Belfield) – Vice President  
Connie Jalbert (New England) – Director  
Larry Lundberg (Killdeer) - Director  
Carrie Zachman (Beach) – Director  
Ashlie Palmer (Hebron) – Director  
Brent Seaks (Dickinson)– Director  
Joy Laufer (Hettinger) – Director  
Peter Remboldt (Glen Ullin) – Director  
Jodi Hoff (Richardton-Taylor) – Director  
John Pretzer (Scranton) – Director  
Barb Meduna (South Heart) – Director

### RACTC Teachers

#### Health Sciences:

Bobbi Schnieder  
Sara Rhode  
Joseph Champa  
Colin Hulm  
Jaclyn Guillaume  
Courtney Sadowsky

#### Agriculture:

Riston Zielke  
Misti Steeke

#### Business Education

Shelly Christensen

#### Career Development

Leanne Benes - Beach  
Jared Bollom - Glen Ullin  
Trista Dakken - Hebron  
Maxine Hauck - Dickinson  
Kari Mayer - Mott/Regent  
Krista Olson - Hettinger  
Kristi Voth - New England  
Emily Henson - Belfield  
Bobbie Olson - South Heart

## General Information

#### Registration lock-in Date:

**May 6, 2022:** After this time, substitutions and additions can be made but cancellations/drops will be charged the course enrollment student fee.

#### Drop/Payback Policy:

It is recommended that each school has a policy in place for a student to pay the school back if he/she decides to drop after the registration lock-in date.

#### Dual Credit:

Dual Credit will be available through Dickinson State University for Medical Terminology.

#### Member Dues:

RACTC member dues start at \$1,500 for the first 10 students attending the center (schools enrolling zero students in a given year will still be assessed \$1,500). This set fee increases by \$500 for every 10 students. Each member school will be assessed an additional \$500 for every student enrolled. Nonmember schools will be assessed \$700 for each student enrolled in RACTC classes. A \$3500.00 membership will be charged for each school participating in the RACTC Emerging Technology Consortium.

#### Grade Scale:

Grade scales are set by individual instructors and/or member schools.

# AGRICULTURE EDUCATION

## VET SCIENCE (01067)

Grade: 10 - 12    0.5 Credit    Fall Semester    ITV - 4th Period

This course is designed to prepare students for careers in the field of animal science by introducing them to veterinary practices as they relate to both large and small animal species. The student will participate in laboratory and field investigations and demonstrate safety by using critical thinking, scientific reasoning, and problem solving to make informed decisions. They will research and describe the history of veterinary medicine, current topics, the importance of animals in society, and the professional ethics and laws that relate to veterinary medicine. The student will learn to explain the human-animal bond and animal welfare. The student will identify anatomical structures and systems of animals and correct terminology while exploring animal management as it relates to animal identification, animal characteristics, and behavioral temperament (i.e. normal behavior compared to sick.) The student will evaluate animal diseases and parasites, and can evaluate an animal’s health during a clinical examination while safely operating and maintaining equipment used in veterinary science. The student will also learn to determine nutritional requirements and maintaining a healthy animal. The student will thereby be conscious of procedures, skills, and objectives that are included in the job description of an animal care assistant.

## LIVESTOCK PRODUCTION (01061)

Grade: 10 - 12    0.5 Credit    Spring Semester    ITV - 4th Period

This course is designed to prepare students for careers in the field of animal science and production in species including, but not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. The student will demonstrate technical skills relating to the interrelated human, botanical, scientific, and technological dimensions of animal systems and be able to assess the importance of the United States impact on world commodity markets while applying the principles of livestock breeding and nutrition in predicting the impact of current advances in genetics. The student is expected to describe common veterinary procedures and skills, practice proper animal restraint techniques, demonstrate identification techniques, and demonstrate effective management strategies. The student will learn the anatomy and physiology related to nutrition, reproduction, health, and management of domesticated animals. The student is expected to discuss feeding practices and feed quality issues, explain animal genetics and reproduction, and research current and emerging technologies in animal reproduction. The student identifies animal pests and diseases and methods of disease control, treatment, and prevention. The student knows the factors impacting commodity prices and costs.

## EQUINE SCIENCE (01062)

Grade: 10 - 12    0.5 Credit    Spring Semester    ITV - 7th Period

This course is designed to provide students with opportunities to learn, reinforce, apply, and transfer their knowledge and skills of animal systems (including, but are not limited to, horses, donkeys, and mules.) The student will analyze the selection of horses, how to provide proper nutrition using accepted protocols and processes, describe the anatomy and physiology of horses, and select equipment and facilities which demonstrate methods of handling and breeding horses safely. The student will compare and contrast issues affecting the industry and describe issues concerning biotechnology related to the equine field. The student will also learn the employability characteristics of a successful employee in the field of equine science by participating in laboratory-based, or other supervised, agricultural experiences, and learn from the challenging hands-on approach in equine activities.

## AGRICULTURE SALES AND SERVICE/MARKETING (01034)

Grade: 10 - 12    0.5 Credit    Fall Semester    ITV - 3rd Period

To provide students with skills necessary for entry into employment or furthering education in agriculture sales and service. The course deals with business organizations, business structures, job responsibilities, job applications, and interviewing, human relations, marketing, selling, displaying, using business machines, business accounting, and management skills. Learning activities are varied with classroom, laboratory, and field experiences. Leadership development and supervised agricultural experience programs are an integral part of this course.

## AGRONOMY SCIENCE (01025) OR BOTANY SCIENCE (13024) Science Credit

Grade: 10 - 12    0.5 Credit    Spring Semester    ITV - 3rd Period

This course is designed to prepare students for careers in the field of Botany and crop management. This course deals with, classifying living things, cellular biology, genetics and biotechnology, basic principles of soil science, soil erosion and land management, managing soil fertility, introduction to plant science, plant anatomy and physiology, plant propagation, examining plant growth, integrated pest management, producing grain and oil crops, grain transportation, storage and quality, producing forage, fiber, and sugar crops, producing fruits and vegetables. ***Dual Credit for World Food Crops through Dickinson State College. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.***

## INTRODUCTION TO AGRICULTURE (01011)

Grade: 10 - 12    0.5 or 1 Credit    Fall or Spring Semester/Full Year    Online

www.myaert.com will be the source used to provide information to the students through the use of Moodle. This would be an online class only with Videos and lectures posted by the teacher. This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Ag Education program. Individual units will familiarize the student with: basic mechanical theory and skills –principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals; soil and plant relationships that affect the production of food and fiber. Topics may include: soils, irrigation, land judging, plants, crop and weed identification, range management, horticulture, nursery, diseases, insects, and chemicals. Students are introduced to agricultural sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Units may also include agricultural construction, food and fiber science, supervised agricultural experiences, and leadership development. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth science.

## SMALL ANIMAL CARE (01066)

Grade: 10 - 12    0.5 Credit    Fall Semester    ITV - 7th Period

This course is designed to teach students about the management of small animals, which may include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats. The student will understand the importance of responsible small animal ownership by explaining the domestication and use of small animals, the influence small animals and the small animal industry on society, and the hazards associated with working in the small animal industry (including transmittance of disease and handling of dangerous chemicals). The student will evaluate current topics in animal rights and animal welfare. Students will learn the physical characteristics for each species studied; list the breeds or types of each species; discuss the habitat, housing, and equipment needs for each; compare and contrast nutritional requirements; describe and practice common methods of handling; and use available laboratory equipment.

# BUISINESS EDUCATION

## ACCOUNTING I (14010)

Grade: 9 - 12    0.5 Credit    Fall Semester    Online

Students will learn the fundamentals of accounting principles that include: terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting. Simulation packets are often integrated in the course.

## ACCOUNTING II (14011)

Grade: 9 - 12    0.5 Credit    Spring Semester    Online

Prerequisite: Accounting I

Students will continue learning the fundamental concepts of Accounting. Topics covered include terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting.

## ACCOUNTING III (14012)

Grade: 10 - 12    0.5 Credit    Fall Semester    Online

Prerequisite: Accounting I and II

Students will acquire a more thorough, in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting financial information common to businesses. A contemporary business simulation set that lets the student put accounting skills into practice is often included.

## ACCOUNTING IV (14013)

Grade: 10 - 12    0.5 Credit    Spring Semester    Online

Prerequisite: Accounting I - III are required

Students will continue to develop skills in analyzing and interpreting information common to corporate forms of organization, preparing formal statements and supporting schedules, and using inventory and budgetary control systems. Higher level corporate, managerial and cost accounting concepts are presented in this course. A contemporary business simulation set that lets the student put accounting skills into practice is often included.

## MULTI MEDIA (14099)

Grade: 9 - 12    0.5 Credit    Spring Semester    Online

Students will use digital images and videos to create meaningful documentation, production, and presentations. Images, logos, backgrounds, and navigation tools for digital display will be used in multimedia and internet applications.

## BUSINESS LAW (14090)

Grade: 9 - 12    0.5 Credit    Fall Semester    Online

Students will be introduced to the fundamental background of the development and enforcement of laws, the difference between criminal and civil law, and our present court system and how it works. Topics to be discussed include laws concerning contracts, sales, consumers, property, computers, family, environment, wills and trusts, and bankruptcy.

## COMMUNICATION TECHNOLOGIES (14028)

Grade: 9 - 12    0.5 Credit    Spring Semester    Online

Students will study the history of the Internet, Internet safety and etiquette, appropriate research techniques, online communication, video conferencing, social networking, network security, and a study of e-business.

# HEALTH SCIENCE

## MEDICAL CAREERS I (07033)

Grade: 10 - 12    1 Credit    Full Year    Online / ITV - 2nd Period OR 3rd Period

This course is designed to assist students interested in the medical field in determining an occupation that will best suit their capabilities and interests. The students will be given a foundation in areas such as: Medical Terminology, Anatomy and related Disorders, Professional Standards, Safety, Monitoring Body Functions, Disease Prevention, CPR and First Aid Certification, and Introduction to Health Careers. The student will explore careers such as Physical Therapy, Occupational Therapy, Optometry, Radiology, Respiratory Therapy, Medical Records, Dental Careers, Medical Lab, and others. Emphasis on academics, professional development, leadership and organizational skills are integrated into the curriculum.

## MEDICAL CAREERS II (07035)

Grade: 11 - 12    1 Credit    Full Year    Face-to-face

This course is for Dickinson Public School's students only.

The Advanced Health Careers program has been developed to provide students interests in the medical field an in-depth study of a career of their choice which best suits their capabilities and interests. The program is a competency based individualized curriculum in which the student will learn to balance various aspects of health and wellness, improve self-esteem, and make knowledgeable decisions regarding their career choices. It is a 360 hour program designed for the student who has completed a minimum of 180 hours of Health Careers and plans to further their education in a medical field or plans to seek employment immediately following graduation. A primary component of the Advanced Health Careers course offers in-depth career studies. Students will expand their skills and knowledge in specific areas of interest during clinical rotations in the community. Emphasis on academics, professional development, leadership, and organizational skills are integrated throughout the curriculum.

## MEDICAL TERMINOLOGY (07036)

Grade: 10 - 12    1 Credit    Full Year    Online/ITV - 4th Period

This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes, and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studied for each body system. The student will also learn medical terminology as it relates to pathology, diagnostics, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems. **Dual credit available through Dickinson State University. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.**

**PREVENTION AND CARE OF ATHLETIC INJURIES (07034)**  
Grade: 10 - 12    1 Credit    Full Year    Online/ITV - 7th Period

Provides the students with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder management daily of athletic injuries and skills to fulfill the activities of daily living. Students will be able to complete the requirements to become a student athletic trainer.

**EMERGENCY MEDICAL SERVICES (07045)**  
Grade: 10 - 12    1 Credit    Full Year    Online/ITV - 6th Period

Students enrolling in this course will complete training in CPR for Health Care Providers and the National Curriculum Emergency Medical Technician-Basic Course. This course prepares the students to respond to a wide range of emergencies such as heart attacks, auto accidents and diabetic problems. Students will be required to participate in extensive “hands-on” practical sessions using modern prehospital care equipment under the instruction of paramedics from the local paramedic service. Upon completion of the course, students are eligible for ND State licensure testing. The EMS Basic testing including cost will be the responsibility of the student if the student wishes to become an EMT Basic.



**HEALTH EDUCATION SUPERVISED OCCUPATIONAL EXPERIENCE (07999)**  
Grade: 11 - 12    0.5 credit per semester (max of 4 credits allowed)    Full Year  
Online + face-to-face and on the job training

Provides students with a regularly scheduled, supervised employment opportunity related to Health Career Occupations in order to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student’s occupational goals, and related to the health program area. There shall be a training agreement among all partners to the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessment of student progress and for on-site visits by the instructor during the student’s placement. ***Students must be at least 16 years old and may be paid a wage by the employer.***

**BUILDING TRADES**  
**OPERATING ENGINEERS PATHWAY**

Get a jump start on the training and skills needed for a career as an operating engineer by enrolling in the Roughrider Area Career and Technology Center.

Through this unique partnership with the RACTC and the IOUE Local 49, students can take 4 semester courses that earn high school elective credits while getting the necessary training to enter the Operating Engineers Apprenticeship Program following graduation.

continued on next page

**CAR022: CONSTRUCTION EXPLORATIONS**  
Fall/Spring Semester    Online    9-12 Grade

This course provides students with an introduction of the basic equipment used in the construction industry. Students learn about basic equipment operations and job responsibilities. This course prepares students to use concepts pertaining to safety, maintenance, mathematics and communication that Operating Engineers may experience.

**MFG010: BASIC GRADE & CONSTRUCTION MATH**  
Fall/Spring Semester    Online    9-12 Grade

In the construction industry, grading is the work of ensuring a level base, or a grade with a specific slope. Grade construction work is needed in almost any building project, from laying a building foundation, to landscaping, or even roadwork. In this course, you will be introduced to core equipment used in the staking process, as well as Personal Protective Equipment (PPE) used in the construction industry. Communication processes used in the construction industry for interpreting and setting grade are also an important part of this course. Finally, you will learn mathematical concepts related to the construction industry for grade staking.

**MFG201: AB BASIC CONSTRUCTION EQUIPMENT FUNDATMENTALS**  
Fall/Spring Semester    Online    9-12 Grade

In the construction industry, the proper use of heavy equipment is necessary to ensure quality work and a safe work environment. In addition, being able to recognize and determine the use of specific heavy equipment, will create a more efficient work team. Heavy equipment is used in almost any construction project, from building a house to excavating for a new road. In this course, you will be introduced to core equipment used by operating engineers, as well as their maintenance needs. Communication processes used by operating engineers, rigging and signaling practices, safety awareness and mathematical concepts related to the construction industry are also covered.

**MFG202: ALV BASIC MAINTENCE OF MOBILE EQUIPMENT**  
Fall/Spring Semester    Online    9-12 Grade

This course focuses directly on maintenance of mobile equipment through a series of engaging tutorials. A major focus of the course is on maintenance safety including such topics as LOTO. Other topics include tools and fasteners, preventative maintenance principles, engines, intake and exhaust, fuel systems, coolant systems, filters and filtration, lubrication systems, hydraulics, electrical systems, tires, and tracks and undercarriages.

Next Step: Apprenticeship - **Please note that students may be required to be 18 years old to operate equipment during their apprenticeship.**



# GREAT WESTERN NETWORK (GWN)

## GWN ADMINISTRATION

### Bill Strasser

GWN Director  
Office: 701-226-2541  
Bill Strasser@k12.nd.us

### Alissa Thiele

WesternND CTC Powerschool Registrar  
and Marketing Coordinator  
Office: 701-337-6871  
Alissa.Thiele@k12.nd.us

## GWN Teachers

### Spanish

Melinda Berg  
Sandy Meidinger  
Christie Anderson  
Nicole Neumiller  
Jessica Johnson

### Law

Jessica Hoff

### Family and Consumer Science

Melora Buchholz

### Anatomy

Jerad Dewald

### Art

Courtney Halverson  
Vicky Gullickson

### American Sign Language

Jolene Hafner

### German

Martina Dvorak

### German/Spanish/English

Sharon Klein

### Radio Broadcasting

Jay Schmaltz

## Scheduling Procedure

- Step 1:** Take a look at the draft schedule on the GWN web site ([www.gwn.k12.nd.us](http://www.gwn.k12.nd.us)) Determine the courses you would like to receive and/or the courses that your school would be willing to send. Email these requests to [Alissa.Thiele@k12.nd.us](mailto:Alissa.Thiele@k12.nd.us) (Be specific; example – “We could teach Algebra II at 1:32 pm CST” or “would like to receive Spanish I at 10:32 am CST”) The director will up date your requests on the web page.
- Step 2:** The draft schedule is continuously being updated on the GWN web site by the GWN director showing changes or confirmations requested by principals and/or counselors. (Helpful Hint – start the process early. Report changes or requests as often as you like, this helps others know what your school wants to teach or receive and others can adjust accordingly.)
- Step 3:** **Lock in date is Friday, May 6th, 2022.** “Locking in” student numbers is your best estimate of the number of students that you plan on having in each ITV class for next year. (Be aware that you may be charged for the tuition costs of students that don’t show up for class next fall)
- Step 4:** After the lock-in date, GWN will determine if there are enough students enrolled to warrant the class. Teachers will then be contracted accordingly based on these lock-in numbers. If a class is dropped, you will be notified and have an opportunity to add other classes in its place.

To view all available courses and the ITV schedule, please visit  
<https://sites.google.com/view/greatwesternnetwork/home>

# Great Western Network Courses

## AMERICAN SIGN LANGUAGE

Grade: 9 - 12 1 Credit Full Year

- ASL I - 06315
- ASL II - 06316
- ASL III - 06317
- ASL IV - 06318

## LAW (14090)

Grade: 9 - 12 1 Credit Full Year

- Criminal, Personal & Business

## MATH

Grade: 9 - 12 1 Credit Full Year

- Trigonometry - 11160
- Pre-Calculus - 11181

## ANATOMY (13021)

Grade: 9 - 12 1 Credit Full Year

## ART

Grade: 9 - 12 1 Credit Full Year

- Art I - 02020
- Art II - 02021
- Art III - 02022
- Art IV - 02029

## RADIO BROADCASTING

Grade: 9 - 12 1 Credit Full Year

- Radio I - 17140
- Radio II - 17140

## DEVELOPMENTAL ENGLISH (05011)

Grade: 9 - 12 1 Credit Full Year

## FAMILY AND CONSUMER SCIENCE

Grade: 9 - 12 0.5 Credit

- Independent Living - 09025 - Fall Semester
- Family Living - 09132 - Spring Semester

## SPANISH

Grade: 9 - 12 1 Credit Full Year

- Spanish I - 06211
- Spanish II - 06212
- Spanish III - 06213
- Spanish IV - 06214

## GERMAN

Grade: 9 - 12 1 Credit Full Year

- German I - 06291
- German II - 06292
- German III - 06293
- German IV - 06294

## NOTES

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