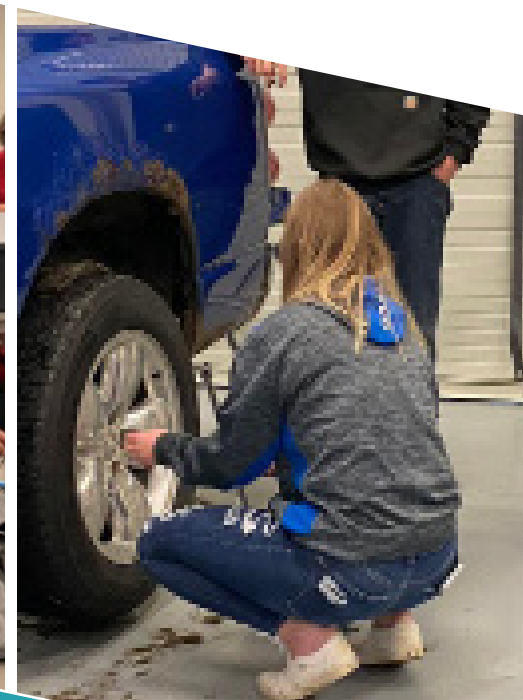




**GREAT  
WESTERN  
NETWORK**



**BASC**  
Bakken Area Skills Center



2024-2025  
COURSE  
CATALOG  
AND PROGRAM INFORMATION



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**PLEASE NOTE: ALL** registrations from each of the listed distance providers (CRACTC, BASC, GWN IT, and RACTC) should be completed **IN FULL** using the Western Dakota registration form found at: <https://cractc.org/admin-info/> or contact Amy Johnson for a copy of the form.

**Please send completed registration forms to Amy Johnson, Western Dakota Registrar, at [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us) by the listed due date in May 2024.** 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!



PREPARING TODAYS STUDENTS FOR TOMORROWS EXPERIENCES

### **CRACTC/CREA ADMINISTRATION**

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CTE Director CRACTC  
& Bismarck Public Schools  
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WesternND CTC Powerschool Registrar  
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amy.a.johnson@k12.nd.us

**Luke Schaefer**

CREA Executive Director  
Office: 701-751-4041 ext. 105  
Email: Luke.Schaefer@k12.nd.us

**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:**

TBD

**Aviation:**

Jeff Horan

**Marketing:**

Michelle Hoff

**Information Technology:**

Jason Horner

**Health Science Careers:**

Lisa Brew  
Blaine Steiner  
Lorie McCarthy  
Jessica Mehlhoff  
Jessica Schafer

**Family and Consumer Science:**

Kayla Koth

**Graphic Arts:**

Kristy Horner  
Amanda Anderson

**STEM - Tech. & Engineering:**

Tim Meyer  
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.

HELPING PREPARE TODAY'S 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 for member schools 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, 504 and/or ESL 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 [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@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 26th, 2024**

### **Lock-in date - May 10th, 2024**

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 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, Amy Johnson at amy.a.johnson@k12.nd.us.

**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>***

continued on next page...



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/ESL 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), 504, and/or ESL 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)

Grades: 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)

Grades: 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)

Grades: 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

# AVIATION

## AVIATION I (17812)

**Grades: 10-12      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.



## AVIATION II (17813)

**Grades: 11-12      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.

## POSSIBLE CAREER PATHWAYS IN AVIATION:

- PILOTING
- AIRCRAFT TECHNICIAN
- AIRCRAFT MECHANIC
- FLIGHT INSTRUCTOR
- AIR TRAFFIC CONTROLLER
- AEROSPACE ENGINEER





# FAMILY AND CONSUMER SCIENCE

## FAMILY AND CONSUMER SCIENCE I (09022)

Grades: 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)

Grades: 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)

Grades: 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)

Grades: 10 – 12

0.5 Credit Fall Semester

Online + hands-on component

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)

Grades: 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)

Grades: 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)

Grades: 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.



### POSSIBLE CAREER PATHWAYS IN GRAPHIC ARTS:

- GRAPHIC DESIGNER
- ILLUSTRATOR
- WEB DESIGNER
- FILM EDITOR
- ART DIRECTOR



# HEALTH SCIENCE

## HEALTH SCIENCE I (07033)

Grades: 10 - 12

1 Credit

Full Year

Online or ITV 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. **Dual Credit is available through Bismarck State College during Spring semester. Must be in 10th Grade to enroll in dual credit courses.**

## HEALTH SCIENCE II (FORMERLY ADVANCED MEDICAL CAREERS) (07035)

Grades: 11, 12

1 Credit

Full Year

Online + hands-on component

### Prerequisite: Health Sciences I

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)

Grades: 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 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 also be expected to use correct spelling and pronunciation of medical terms they have learned and will learn commonly used medical abbreviations.



## EMERGENCY MEDICAL RESPONDERS (07045)

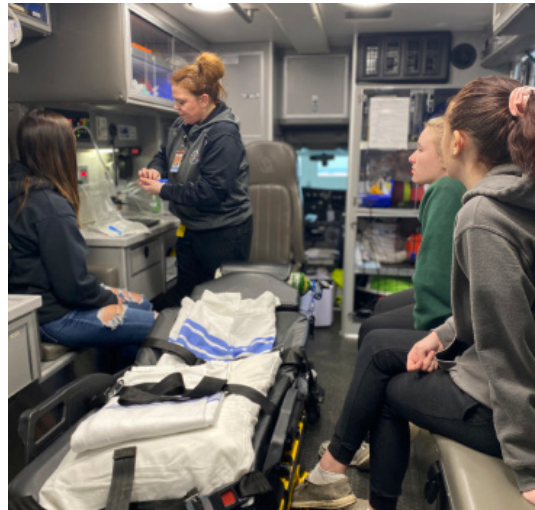
Grades: 11, 12

1 Credit

Full Year

Online + hands-on component

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.*



## CERTIFIED NURSING ASSISTANT (07032)

Grades: 11, 12

0.5 Credit

Fall and Spring Semester

Online

**Prerequisite: Medical Careers I including First Aid & CPR/AED Certification is required.**

This Certified Nursing Assistant Training program offers online instruction to prepare students for employment as a Certified Nursing Assistant in a skilled nursing facility, acute care or home health care. This North Dakota Department of Health-approved course provides students with the necessary curriculum and supervised skills training to take the state certification test through Headmaster to become a Certified Nursing Assistant. Students must meet the state-required hours by completing online assignments and attending hands-on days. Dual credit is available through Bismarck State College (NURS 100).

**Important Information: Students will no longer be able to “challenge” the ND state test. Students must complete a state-approved education program to be eligible for state testing.**

## POSSIBLE CAREER PATHWAYS IN HEALTH SCIENCE:

- NURSE
- PARAMEDIC
- RESPIRATORY THERAPIST
- RADIATION THERAPIST
- NUTRITIONIST
- PHYSICIAN
- MEDICAL TRANSCRIPTIONIST

# 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.

## COMPUTER HARDWARE & OPERATING SYSTEMS (27219)

Grades: 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)

Grades: 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 to enroll in dual credit courses.**

## NETWORKING FUNDAMENTALS (27266)

Grades: 9 - 12

1 Credit

Full Year

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. **Dual Credit is available through Bismarck State College during Spring semester. Must be in 10th Grade to enroll in dual credit courses.**

## INTRO TO PROGRAMMING (27120)

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

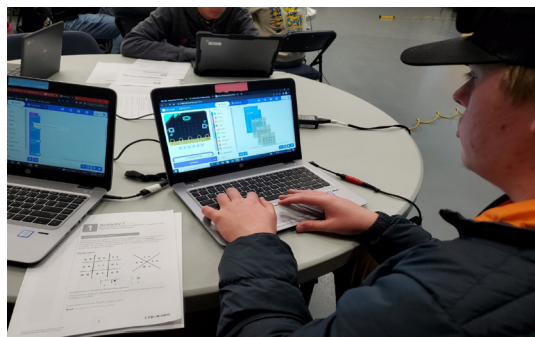
This course is designed as an introduction to programming and programming languages such as Python, Java, JavaScript and C++ commonly used in IT careers in industry today. This course will provide students who have no or very little programming knowledge and experience a solid foundation that could be 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!

## CODING WITH PYTHON (27123)

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

***Dual credit is available through BSC. Must be in 10th Grade 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.



## CODING WITH JAVA (27125)

**Grades: 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.

## INTRO TO VIDEO GAME DESIGN (27130)

**Grades: 9 - 12      0.5 Credit      Fall 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.

## VIDEO GAME DESIGN (27131)

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

**Prerequisite – Intro to Video Game Design**

This course is a continuation of the content and skills learned in Intro to Video Game Design. 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)

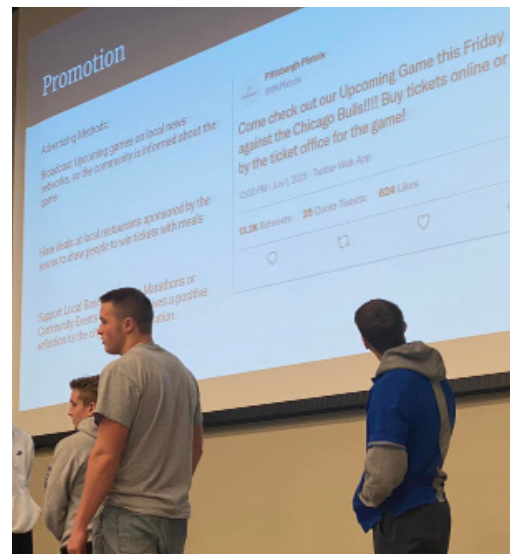
**Grades: 10 - 12**

**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)

**Grades: 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)

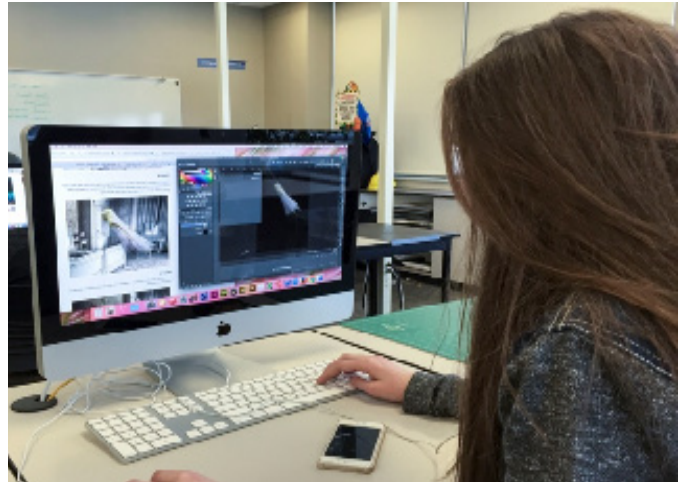
**Grades: 9 - 12**

**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

**\*\*Science credit option is available for STEM I and II. Science credit option is not CTE credit and is not accepted toward the state CTE Scholarship.**

## STEM SEMINAR I

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

**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).*

**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.

# Work Based Learning (WBL)

Kim Jensen is the Work-based Learning Coordinator for over 700 students from within 57 different high schools located throughout mostly Central North Dakota who are taking courses with the Central Regional Area Career and Technical Center (CRACTC). The CRACTC offers Career and Technical Education (CTE) programming in several areas such as Agriculture, Aviation, Family & Consumer Sciences, Graphic Arts, Health Sciences, Information Technology, Marketing, and Technology & Engineering.

Kim's role is to be the bridge between students and industry by coordinating work-based learning opportunities such as job shadows, internships, and/or cooperative work experiences. Kim looks for businesses throughout the Central Region of North Dakota, both rural and urban areas, who would be interested in partnering with the CRACTC to provide these Work-based Learning opportunities for students and future workforce.

## Work Based Learning (WBL)– Cooperative Work Experience I

**Grades: 10-12**

**0.5 Credit**

**Fall or Spring Semester Online/Hybrid**

Class size is limited, and preference will be given to juniors and seniors. Student's must select a program area in which they plan on completing the WBL Cooperative Work Experience and **MUST** have completed **AT MINIMUM** one credit of courses within that selected program area to be eligible for this course!

This course includes both online components providing learning opportunities involving career ready practice skill development including: 1) Responsible employee; 2) Technical Skills; 3) Communication; 4) Problem Solving; 5) Teamwork, as well as on-site work-based learning experience. The employment or practicum will be preceded by the classroom instruction related to the work experience. After completing the required online components, within the semester timeframe of the course, students will be guided to establish a regularly scheduled, supervised employment or practicum opportunity related to their career goals within their selected program area in order to develop and enhance their work skills. There shall be a training agreement among all partners involved in the cooperative work experience (i.e. CRACTC, school, employer and/or supervisor, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer and/or supervisor for each student placed for the work experience portion of this class. The training plan shall include provisions for assessment of student progress, and for on-site visits by the program facilitator during the student's placement. All cooperative work experience placements will require the approval of the school administration and the WBL program facilitator.



# Work Based Learning (WBL) – Cooperative Work Experience II

Grades: 10-12

0.5 Credit

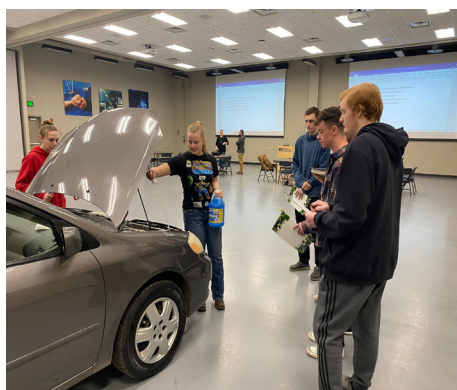
Fall or Spring Semester Online/Hybrid

**Prerequisite: Cooperative Work Experience I is required**

Cooperative Work Experience I must be successfully and adequately completed prior to enrollment in this course. Preference will be given to juniors and seniors who demonstrated strong evidence of the understanding and application of the Career Ready Practices within

Course I. Students who do not demonstrate strong evidence of the understanding and application of the Career Ready Practices within Course I may not be accepted into this course option to help ensure strong working relationships between our program and the participating industry partners. Student's must select a program area in which they plan on completing the WBL Cooperative Work Experience and **MUST** have completed AT MINIMUM 0.5 credit of courses within that selected program area to be eligible for this course!

This course provides students with an extended work-based learning experience beyond their learning in the Cooperative Work Experience I course. The course will be primary involving the regularly scheduled, supervised employment or practicum opportunity related to their career goals that extends beyond their previous learning. There shall be a training agreement among all partners involved in the cooperative work experience (i.e. CRACTC, school, employer and/or supervisor, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer and/or supervisor for each student placed for the work experience portion of this class. The training plan shall include provisions for assessment of student progress, and for on-site visits by the program facilitator during the student's placement. All cooperative work experience placements will require the approval of the school administration and the WBL program facilitator. Preference will be given to juniors and seniors who demonstrated strong evidence of the understanding and application of the Career Ready Practices within Course I. Students who do not demonstrate strong evidence of the understanding and application of the Career Ready Practices within Course I may not be accepted into this course option.



**Hands-on Learning Days**







# BASC

## Bakken Area Skills Center

Main Goal: Provide in-demand training opportunities that are responsive to the needs of our region's workforce through collaborative partnerships with secondary education, post-secondary education/training, and local employers.

### BASC ADMINISTRATION

**Dr. Wayne Heckaman**  
BASC Executive Director  
701-444-3624  
wayne.heckaman@k12.nd.us

**Scott Wisness**  
BASC Assistant Director  
701-570-2935  
scott.wisness@k12.nd.us

**Benjamin Schafer**  
WERC Center Director  
701-741-3678  
ben.schafer@werccenter.com

### BASC Teachers

Pat Axtman

Zackary Bebee

Caitin Schilke

Corey Meuchel

Justin Johnsrud

Jayme Renner

Melissa Meyer - Work-Based Learning  
Coordinator

**Amy Johnson**  
WesternND CTC Powerschool Registrar  
and Marketing Coordinator  
701-641-0569  
amy.a.johnson@k12.nd.us

Additions or changes may be made based on enrollments received.

## General Information

### Registration lock-in Date:

**May 10, 2024:** After this time, substitutions and additions can be made but cancellations/drops will be charged the course enrollment student fee.

Enrollment Cost: \$400 per semester course - \$800 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. Contact Williston State College at 701-774-4500. They have offered to come to your High School to help enroll students. Your student(s) should start this enrollment process right away and will need to pay the tuition and fees.

### 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

## INTRODUCTION TO AGRICULTURE (01011)

**Grades: 9 - 12      0.5 or      1 Credit      Fall or Spring Semester/ Full Year      Online + hands-on component**

Agriculture encompasses a broad area of life! This Introduction course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Ag Education program. Some of the topics will include, but not limited to, animal science, plant science, vet science, leadership and much more. This introduces the student to the array of opportunities with in the Agriculture Industry! Students in this course will be introduced to FFA and have the opportunity to join FFA if their host school does not offer it. Students will complete a work-based learning experience, such as a job shadow or other Supervised Agriculture Experience as part of this course.

## AGRICULTURE PROCESSING (01068)

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



This course is designed to introduce students in the processing of agricultural products. The course will include the processing of food, fiber, and material product processing for the global economy will be emphasized. Personal communication skills, human relation skills, leadership development skills, and supervised agricultural experiences will be emphasized. Dual credit is available through Williston State College requiring hands-on days. (Utilizing your local school lab and/or our Mobile Meat Lab). Travel to Watford City, Williston or another BASC school with the mobile meats will be the responsibility of the local school.

## FARM AND RANCH MANAGEMENT (01035)

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

Are you interested in learning how to run a business in our state's #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, insurance, finance, risk management, Ag business management, & careers. Students will complete a job shadow, or other Supervised Agriculture Experience opportunity as part of this course. Attendance at a Farm & Ranch or Trade Show is expected as part of this course & travel is the responsibility of the local school.

## AGRICULTURE SALES (01034)

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

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, applications, 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 integral to this course.

## **EQUINE SCIENCE (01062)**

**Grades: 10 - 12**

**0.5 Credit**

**Spring Semester**

**Online/ ITV**

This course is designed to provide students with opportunities to learn, reinforce, apply, and transfer their animal systems knowledge and skills (including, but 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 biotechnology-related issues 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 learning from the challenging hands-on approach in equine activities.

## **LIVESTOCK PRODUCTION (01061)**

**Grades: 10 - 12**

**1 Credit**

**Full Year**

**Online/ ITV**

This course is designed to prepare students for careers in 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 while understanding the nutritional requirements of ruminant and nonruminant 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 disease control, treatment, and prevention methods. The student knows the factors impacting commodity prices and costs.

## **VET SCIENCE (01067)**

**Grades: 10 - 12**

**0.5 Credit**

**Fall Semester**

**Online/ ITV**

This course is designed to prepare students for careers in animal science by introducing them to veterinary practices related to large and small animal species. The student will participate in laboratory and field investigations and demonstrate safety 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 related to veterinary medicine. The student will learn to explain the human-animal bond and describe the legal aspects of 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 identifies internal and external 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 the importance of nutrition in maintaining a healthy animal. The student will be conscious of the procedures, skills, and objectives included in the job description of an animal care assistant. Dual credit may be available through Williston State College.



## EARLY ENTRY COURSES THROUGH WILLISTON STATE COLLEGE: (DUAL CREDIT IF YOUR SCHOOL ALLOWS)

ANSC 114:	Intro to Animal Science	3 Credits	Spring Semester	Online
ANSC 260:	Intro to Equine Science	3 Credits	Fall Semester	Online
AGRI 150:	Agriculture Orientation	2 Credits	Fall Semester	Online
ANSC 220:	Livestock Production	3 Credits	Spring Semester	Teams Hybrid
ANSC 160:	Equine Nutrition	2 Credits	Spring Semester	Online (ANSC 260 pre-req)
ANSC 242:	Intro to Meat Processing	2 Credits		4 week Hybrid Online with 2 day lab at WSC

## AUTOMATION AND MANUFACTURING

### FUNDAMENTALS OF TECHNOLOGY (AUTOMATION) (37140)

**Grades: 9 - 12                      0.5 Credit                      Fall and Spring Semester                      Hybrid + hands-on component**

The Fundamentals of Technology course at the BASC is designed to teach industrial technology career foundation skills. Completion of this course ensures readiness for successful completion of one of the BASC Career Pathways. The course also serves as an opportunity for students to explore a wide variety of technologies to aid them in identifying personal aptitudes and interests. Students will meet at the Bakken Area Skills Center in Watford City for hands-on supervised days as part of this class. Travel to the facility will be the responsibility of the local school.

### FOUNDATIONS OF WELDING (17235)

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

This course will expose students to opportunities in the manufacturing industry, including occupations such as assembler, manufacturing technician, machine operator, welder, and other occupations in the production pathway. Students learn about the processes involved in manufacturing and welding and may engage in various small projects. This course emphasizes responsibilities, qualifications, work environment, safety, and career paths within construction-related fields. This class is a pre-requisite for Welding Technology. Students will meet at the Bakken Area Skills Center in Watford City for hands on supervised days as a part of this class. Travel to the facility will be the responsibility of the local school.

### WELDING TECHNOLOGY (17236)

**Grades: 10 - 12                      0.5 or 1 Credit                      Spring Semester                      Online + hands-on component**

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. Welding students may participate in the student organization SkillsUSA. Dual credit opportunities through Williston State College may be available. Students will meet at the Bakken Area Skills Center in Watford City for hands on

# BUILDING TRADES

## **FOUNDATIONS OF BUILDING TRADES (17105)**

**Grades: 9 - 12**

**0.5 Credit**

**Fall Semester**

**Online + hands-on  
component**

Foundations of Building Trades is a Pre-requisite for Building Trades I.

Foundations of Building Trades provides an introductory orientation to the building trades that meets industry standards. The course includes Basic Shop and Job Site Safety, Construction Math, Construction Literacy, Introduction to Hand and Power Tools, Introduction to Construction Drawings, Communication, Team Building, Organization, and Employability Skills. Fundamentals of building are introduced including Foundation Systems, Framing Methods, Roof Systems and Structure Enclosure. Students will complete OSHA 10 Certification, Hand Tool Certification, and several smaller building projects.

Foundations of Building Trades students may participate in the student organization SkillsUSA. Students will meet at the Bakken Area Skills Center in Watford City for scheduled hands-on supervised days as part of this class. Travel to the facility will be the responsibility of the local school.

## **BUILDING TRADES I (17100)**

**Grades: 10 - 12**

**0.5 Credit**

**Spring Semester**

**Online + hands-on  
component**

Successful completion of Foundations of Building Trades is required to take Building Trades 1.

Building Trades 1 will expose students to the opportunities available in the construction industry, including occupations such as Carpentry, Roofing Plumbing, Heating, Ventilation and Cooling, Safety Supervision, Architecture, Engineering, and other occupations. Students learn about the various processes involved in construction projects and may engage in various small builds. Students will learn about the risks and rewards of operating a construction business and construction planning. This course emphasize responsibilities, qualifications, work environment, safety, collaboration, and career paths within construction-based fields.

Building Trades 1 students may participate in the student organization SkillsUSA. Students will meet at the Bakken Area Skills Center in Watford City for scheduled hands-on supervised days as part of this class. Travel to the facility will be the responsibility of the local school. facility will be the responsibility of the local school.

# HEALTH SCIENCE

## NURSING ASSISTANT (07032)

Grades: 11 - 12

0.5 Credit

Fall or Spring Semester

Class Cap: 12

Online + full days  
of hands-on component

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. Skills would include but are not limited to learning to taking vitals signs, bathing, feeding, and transferring residents in the facility. *There will be 3 full days of hands-on practical learning in Williston or Watford City. The schools are responsible to get their students to these days. Dual Credit is available through Williston State College.*

**Important Information: Students will no longer be able to “challenge” the ND state test. Students must complete a state-approved education program to be eligible for state testing.**

## INTRO TO HEALTH CAREERS (37080)

Grades: 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.

## HEALTH SCIENCE I (07033)

Grades: 10 - 12

1 Credit

Full Year

Online

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.

## INTRODUCTION TO SPORTS MEDICINE (PREVENTION/CARE OF ATHLETIC INJURIES) (07034)

Grades: 9 - 12

1 Credit

Full Year

ITV (9:00-9:50)

Class Cap: 20

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).

## MEDICAL TERMINOLOGY (07036)

Grades: 10 - 12

0.5 Credit

Fall or Spring Semester

Online

Class Cap: 25

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.**

# INFORMATION TECHNOLOGY



## **INTRODUCTION TO INFORMATION TECHNOLOGY (27101)**

**Grades: 9 - 12    0.5 Credit    Fall Semester    Online**

An exploratory level course that provides exposure to careers and issues in information technology. Students will develop SCAN skills, including teamwork, communication, entrepreneurship, and personal management.

## **Programming Essentials - Visual Basic (27122)**

**Grades: 9 - 12                      0.5 Credit                      Spring Semester                      Online**

Basic programming concepts are presented, which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming, including logic, design, coding, structure, and controls, are addressed. Careers in programming are explored, and students are provided opportunities to increase their communication, teamwork, and critical thinking skills. Business projects show how programming skills are used in the business world.

## **CYBERSECURITY (27280)**

**Grades: 10 - 12                      0.5 Credit                      Fall or Spring Semester                      Online**

Introduction to Cybersecurity covers trends in cybersecurity and career opportunities. Course modules will define cybersecurity, explain its importance, and introduce products and processes to secure data. Students will also explore why cybersecurity is critical in business and medical industries, how hackers use unsuspecting individuals to propagate malware, and why cybersecurity is a growing profession.



# TRANSPORTATION

## **Introduction to Commercial Driving License (CDL) (17045)**

**Grades: 10 - 12**

**0.5 Credit**

**Fall and Spring Semester**

**Online + hands-on  
component**

Are you interested in obtaining your CDL license and to have the opportunity to be employed directly after high school? The focus of this class is to expose students to CDL careers and to provide an opportunity to obtain the CDL license. The course will be completed in 3 parts: 1. CDL theory & career exploration, 2. CDL test prep & work-based learning experiences (simulated experiences, pre-trip inspection, job shadow, etc.), 3. Road and range (students have the opportunity to complete this once they turn 18). At the end of the course, students should have the skills needed to obtain a CDL permit and begin to work on the skills needed to pass the CDL drivers test. Students need to be 18 to obtain the CDL permit and to earn the CDL license. Students will meet at the Bakken Area Skills Center in Watford City &/or TrainND in Williston for hands on supervised days as a part of this class. Travel to the facility will be the responsibility of the local school.

## **Introduction to Auto Technology (17032)**

**Grades: 9-12**

**0.5 or 1 Credit**

**Full Year**

**Online + hands-on  
component**

An introductory course in Auto Technology and includes an orientation to the eight areas of NATEF standardized programming; Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning and Engine Performance. This course will also explore the various careers in the Automotive industry and is a prerequisite course to other Automotive courses within the BASC. On-line course content & hands-on days will both be implemented. Auto students may participate in the student organization SkillsUSA. Students will meet at the Bakken Area Skills Center in Watford City for hands on supervised days as a part of this class. Travel to the facility will be the responsibility of the local school.

## **Unmanned Aircraft Systems (17814)**

**Grades: 10-12**

**0.5 or 1 Credit**

**Full Year**

**Online + hands-on  
component**

Are you interested in obtaining your pilot's license and to have the opportunity to be employed directly after high school? This year-long course will include UAS flight principles, career exploration, and will prepare you to pass the FAA Part 107 Remote Pilot Exam. Students may choose to take only a semester and receive 0.5 credit. The course will include online training through TrainND, job shadowing, and simulated work-based learning experiences. At the end of the course, students have the opportunity to complete flight school and obtain their pilot's license. Students will meet at the Bakken Area Skills Center in Watford City &/or TrainND in Williston for hands on supervised days as a part of this class. Travel to the facility will be the responsibility of the local school.

## **Cooperative Work Experience (17999)**

**Agriculture CWE (01999), Business CWE (14999), FACS CWE (09299), Health Science CWE (07999), Information Technology CWE (27999), Marketing (04999), Engineering (10999) & All Other BASC Pathway CWEs (17999)**

**Grade 11-12, (0.5 or 1 Credit), Fall &/or Spring, Online, In-person & On the Job Training  
Prerequisite: 2 CTE Pathway Courses, Instructor- Melissa Meyer**

Cooperative Work Experience provides a student with a regularly scheduled, supervised employment opportunity related to a student's chosen career area in order to develop and improve work skills. Students must have taken coursework within a specific pathway prior to the experience and will be coordinated by the BASC Work-Based Learning Coordinator. 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. Businesses must be approved by the WBL Coordinator & create a Golden Path Solutions Account. Students will be required to create their experience & update it within RUReady. A training plan and competency list will be utilized throughout the experience & site visits completed by the WBL Coordinator, so proximity to BASC schools is necessary.

## **IN-DEVELOPMENT COURSES FOR BASC:**

### **Agriculture Education**

Precision Agriculture  
Pre-Vet

### **Automation and Manufacturing**

Petroleum Technology  
Process Operator

### **Building Trades**

Plumbing  
Electrical  
HVAC

### **Health Science**

Certified Medical Assistant (CMA)  
Licensed Practical Nurse (LPN)

### **Information Technology**

Pre-Engineering

### **Transportation**

Intro to Diesel Tech  
Heavy Equipment Operator



## 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

**Ronda Schauer**

701-928-1676

ronda.schauer@k12.nd.us

#### Amy Johnson

WesternND CTC Powerschool Registrar  
and Marketing Coordinator

701-641-0569

amy.a.johnson@k12.nd.us

Additions or changes may be made  
based on enrollments received.

Visit our website,

<http://ractc.org/>, for updates.

### Governing Board

Lucas Greff	(Mott-Regent)	President
Carrie Zackman	(Beach)	Vice President
Andrea Bowman	(Bowman)	
Brent Seaks	(Dickinson)	
Kim Shafer	(Glen Ullin)	
Ashley Palmer	(Hebron)	
Darin Seamands	(Hettinger)	
Kelli Schollmeyer	(Killdeer)	
Amanda Seymour	(New England)	
Duane Zent	(Richardton-Taylor)	
Kelly Pierce	(Scranton)	
Jule Walker	(South Heart)	

### RACTC Teachers

#### Health Sciences:

Bobbi Schneider

Sara Rhode

Joseph Champa

Jaclyn Guillaume

Courtney Sadowsky

Adrien Kathrein

#### Agriculture:

Riston Zielke

Misty Steeke

#### Business Education

Shelly Christensen

#### Career Development

Shalee Tescher	Beach
Emily Henson	Belfield
Mia Stafford	Bowman
Trista Fisher	Dickinson
Megan Paulson	Hebron
Krista Olson	Hettinger
Nikki Martin	Killdeer
Kristi Voth	New England
Kari Mayer	Mott-Regent
Bobbie Olson	South Heart

Additions or changes may be made based on  
enrollments received.

# General Information

## Registration lock-in Date:

**May 10, 2024:** 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 \$600 for every 10 students. Each member school will be assessed an additional \$600 for every student enrolled. Nonmember schools will be assessed \$800 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

## VET SCIENCE (01067)

**Grades: 10 - 12**

**1 Credit**

**Full Year**

**ITV-4th Period**

**Instructor: Riston Zielke**

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.

## INTRODUCTION TO AGRICULTURE (01011)

**Grades: 10 - 12**

**0.5 or 1 Credit**

**Fall or Spring Semester/Full Year Online**

**Instructor: Misty Steeke**

This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Agriculture 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. This applied course introduces students 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. Skills in identification of equipment, determining a bill of materials. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth sciences.

## **NATURAL/ENVIRONMENTAL RESOURCES (01063)**

**Grades: 10 - 12**

**0.5 Ag Credit (01063), 0.5 Science Credit (13110)**

**Fall Semester  
Online**

This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Agriculture 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. This applied course introduces students 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. Skills in identification of equipment, determining a bill of materials. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth sciences.

## **AGRICULTURE MECHANICS POWER SYSTEMS (01045)**

**Grades: 10 - 12**

**0.5**

**Fall or Spring Semester**

**Instructor: Glen Huettl**

**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.



# BUSINESS

## ACCOUNTING I (14010)

Grades: 9 - 12

0.5 Credit

Fall Semester

Online

Instructor: Shelly Christensen

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)

Grades: 9 - 12

0.5 Credit

Spring Semester

Online

Instructor: Shelly Christensen

**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)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online

Instructor: Shelly Christensen

**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)

Grades: 10 - 12

0.5 Credit

Spring Semester

Online

Instructor: Shelly Christensen

**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.

## MULTIMEDIA (14099)

Grades: 9 - 12

0.5 Credit

Spring Semester

Online

Instructor: Shelly Christensen

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

Grades: 9 - 12

0.5 Credit

Fall Semester

Online

Instructor: Shelly Christensen

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.

# HEALTH SCIENCE

## HEALTH SCIENCE I (07033)

**Grades:** 9 - 11      **1 Credit**      **Fall or Spring Semester**      **ITV/Online/In-Person**  
**Instructors:** Guillaume, Kathrein, Rhode, Sakowsky (Block schedule)  
Schneider (Full Year)      **Class cap: 25**

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. The student will explore various health careers throughout the course. Emphasis on academics, professional development, leadership, and organizational skills are integrated into the curriculum. **Prerequisite: C or better in most recent science course.**

## HEALTH SCIENCE II (07035)

**Grades:** 11, 12      **1 Credit**      **Fall or Spring Semester**      **In-Person**  
**Instructors:** Guillaume, Kathrein, Rhode, Sakowsky (Block schedule)  
Schneider (Full Year)      **Class cap: 12**

This course has been developed to provide students interested in the medical field and indepth study of a careers of their choice. 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 choice. A primary component of the 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. The students will also obtain their American Heart Association Basic Life Support (BLS) certification, HIPAA certification, and create their own career portfolio. **Student is responsible for providing own transportation to job shadowing. Prerequisite: C or better in Health Science 1 as well as teacher recommendation based on prior attendance and discipline issues.**

## MEDICAL TERMINOLOGY (07036)

**Grades:** 11, 12      **1 Credit**      **Fall or Spring Semester**      **ITV/ Online/ In-Person**  
**Instructors:** Guillaume, Kathrein, Rhode, Sadowsky (Block schedule)  
Schneider (Full Year)      **Class Cap: 25**

### **Dual credit through Dickinson State University**

This course is designed to introduce students to medical language used in the health care field. Students will learn prefixes, suffixes, and root words for medical terms. This will include meanings, spellings, and pronunciations. Emphasis on building a working medical vocabulary based on body system. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations for each body system. **Prerequisite: C or better in most recent science course.**



## EMERGENCY MEDICAL RESPONDER (07044)

Grades: 10 - 12

1 Credit

Fall or Spring Semester    ITV/ Online/ In-Person

Instructor: Rhode (In-Person Only), Schneider

Class cap: 15

The EMR course is an introductory competency-based course and follows a curriculum that will be used as a guide to the appropriate procedures to be used when rendering emergency care to the sick and injured. The procedures and protocols that are learned are based on the most current standards of credentialed medical sources. If all course requirements are met, students have the ability to be certified and licensed as an Emergency Medical Responder through the North Dakota Emergency Medical Services. Students will also obtain their American Heart Association Basic Life Support (BLS) certification. **It is recommended students taking the EMR course turn 16 prior to the completion of the course.**  
**Prerequisite: C or better in most recent science course.**



## EMERGENCY MEDICAL TECHNICIAN (07045)

Grades: 12

2 Credit

Full Year

In-Person only

Instructor: Rhode

Class cap: 10

The course prepares the student to respond to a wide range of emergencies such as heart attacks, auto accidents, and other various medical and trauma-related problems. Students participate in extensive hands-on practical sessions using modern pre-hospital care equipment under the instruction of emergency care professionals.

This course is facilitated through the Dickinson Fire Department in conjunction with Sanford Health EMS Education. Course expectations include attending Skill Nights on Mondays from 6:00-10:00 pm located at the DFD. Course Lectures Nights are facilitated online on Tuesday evenings from 5:00-9:00 pm. It is encouraged that students be present with their other classmates to participate in the lecture together. Students must pass the course with 76.5% or better to be eligible to take the NREMT certification exam. The NREMT exam cost is \$80, the student is responsible for this cost. Ride-along time with a local ambulance service is a requirement of the course for licensure and certification. Other course costs are covered by the Rural EMS Grant and RACTC. Dual-credit option through NDSCS with a cost of \$153.96/credit plus a \$95/credit instructor fee. See the link below for more information.

<https://www.ndscs.edu/become-wildcat/admission-information/dual-credit/tuition-and-fees>

**Prerequisite: Student must have taken and passed one of the following Health Science classes with an 80% or better- Health Science 1, Emergency Medical Responder (EMR), or Medical Terminology as well as teacher recommendation based on prior attendance and discipline issues.**

## INTRODUCTION TO SPORTS MEDICINE (07034)

Grades: 11, 12      1 Credit      Fall or Spring Semester      ITV/ Online/ In-Person  
Instructors: Guillaume, Kathrein, Rhode, Sadowsky (Block schedule)  
Schneider (Full Year)      Class Cap 15

In this course students who are interested in athletics and the medical needs of athletes will cover four distinct disciplines which will allow them to grasp the concepts of anatomy and physiology, and then apply them to sports medicine and athletic training. Students will be assigned to job shadow and athletic trainer or other professionals in sports medicine during this course. American Heart Association BLS Certification upon completion of the class. **Prerequisite: C or better in most recent science course.**

### Introduction to Sports Medicine (07034)

Instructor: Champa

Online

An all-encompassing sports medicine class designed to captivate students' interest and immerse them in a potential career path. This course emphasizes real-life applications, covering aspects such as injury prevention, strength and conditioning, and nutrition, enabling students to immediately apply learning concepts. Furthermore, health practitioners will actively contribute by teaching assessment, taping techniques, and more, providing students with live access to gain insight into the sports medicine profession. Please note that this is an online course, allowing flexibility for students to engage at any time, provided they possess strong motivation, time management, and scheduling skills.

## CERTIFIED NURSE AIDE (07032)

Grades: 10 - 12      1 credit      Fall or Spring Semester      In-Person  
Instructors: Guillaume, Kathrein, Rhode, Sadowsky (Block schedule)      Class Cap: 10

This course provides classroom instruction to those interested in becoming a Certified Nurse Aide. This course teaches fundamental nursing skills performed by a Certified Nurse Aide, employability skills, communication, legal responsibilities, ethics, safety, teamwork, health maintenance practices, information technology, and medical terminology. Students are given supervised practical training and prepare for employment in various clinical settings. **Prerequisite: C or better in Health Science 1 or EMR as well as teacher recommendation based on prior attendance and discipline issues.**

## FIREFIGHTER I (07999)

Grades: 11, 12      1 credit      Full Year (A/B)      In-Person  
Instructors: S. Rhode, J. Rhode, Presnell, Hofer      Class Cap: 20

This entry-level firefighter training course focuses on an intense hands-on approach to firefighting, which promotes both skill competency and an understanding of the fireground. Recruits will learn the fundamental skills of becoming a firefighter. Required skills training is held every Wednesday evening at 6:30-9:30 pm with some addition Saturdays for live fire training. Upon successful completion of this course, student will be eligible to take the Firefighter I certification test. **Students must be at least 16 years old to take this class. Dual Credit through Dickinson State University.**

## FIREFIGHTER 2 (07999)

Grades: 11, 12

1 credit

1 Semester (A/B)

Instructors: Rhode, Geiger

In-Person

Class Cap: 20

This course provides the student with the knowledge and skills necessary to operate under general supervision during firefighting operations. This course focuses on an intense hands-on approach to advanced firefighting skills. Students will experience advanced lectures to promote critical thinking, practical skills evaluations to promote competency, and live fire scenarios to promote teamwork and coordinated fire attack. **Registration for college credits may be available. Prerequisite: Firefighter I, including successful completion of Hazardous Materials Operations certification.**



## HEALTH OCCUPATION EXPERIENCE PROGRAM (07999)

Grades: 11, 12

0.5 credit per semester (max of 4 credits allowed) Full Year

Online/ In-Person/ and on-the-job training

Instructors: Schneider, Rhode

Class Cap: Variable

This course provides students with a regularly scheduled, supervised employment or internship opportunity related to a health career. The placement 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 work experience agreement among all partners (school, employer or clinical site, student, and parent/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer or clinical site 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. \*\*The Work-Based Learning Application must be filled out completely and submitted. Please note that not all students will be accepted. Content areas: Dental Assisting, Pharmacy Tech., Direct Support Staff (Able, Inc.), EMT, CNA, and any other health related areas of interest may be accommodated for internships if placement is possible. (Example: PT, OT, Speech Therapy, Lab, Vet. Assistant, etc.)**

**Dental Assisting:** The students will be paired with a local dentist for a two-year commitment of approximately 3 hours of job-shadowing a week. This course consists of online academic modules and on-the-job shadowing and training. Once the course requirements are met and job shadowing hours (300 hours total) obtained the student will have the opportunity to apply for North Dakota licensure as a Qualified Dental Assistant. Apply your sophomore year for consideration.

**Certified Nursing Assistant:** The student is hired as an employee at a nursing home. Student will be expected to show up for scheduled shifts, meetings, and other job requirements, and complete assigned work tasks.

**Direct Support Professional:** The student is hired as an employee of ABLE, Inc. to provide support to people with disabilities in all aspects of their lives. Students will be expected to show up for scheduled shifts, meetings, and other job requirements and complete assigned tasks. Students will be accepted upon successful application and interview process.

**Pharmacy Technician:** The student is hired as an employee of Clinic Pharmacy or Medicine Shoppe Pharmacy. The course consists of online academic modules and on-the-job experience. (160 hours total). Upon completion of course requirements the student will obtain the Certified Pharmacy Technician certification.

**Emergency Medical Technician (EMT):** The course prepares the student to respond to a wide range of emergencies such as heart attacks, auto accidents, and other various medical and trauma-related problems. Students participate in extensive hands-on practical sessions using modern pre-hospital care equipment under the instruction of emergency care professionals. This course is facilitated through the Dickinson Fire Department in conjunction with Sanford Health EMS Education. Course expectations include attending Skill Nights on Mondays from 6:00-10:00 pm located at the DFD. Course Lectures Nights are facilitated online on Tuesday evenings from 5:00-9:00 pm. It is encouraged that students be present with their other classmates to participate in the lecture together. Students must pass the course with 76.5% or better to be eligible to take the NREMT certification exam. The NREMT exam cost is \$80, the student is responsible for this cost. Ride-along time with a local ambulance service is a requirement of the course for licensure and certification. Other course costs are covered by the Rural EMS Grant and RACTC. Dual-credit option through NDSCS with a cost of \$153.96/credit plus a \$95/credit instructor fee. See the link below for more information.

<https://www.ndscs.edu/become-wildcat/admission-information/dual-credit/tuition-and-fees>

**Prerequisite:** Student must have taken and passed one of the following Health Science classes with an 80% or better- Health Science 1, Emergency Medical Responder (EMR), or Medical Terminology as well as teacher recommendation based on prior attendance and discipline issues.

## TRADE AND INDUSTRIAL

### ELECTRICAL TECHNOLOGY (17125)

**Grades:** 11, 12      **1 credit**      **Full Year**      **Online + hands-on component**  
**Instructor:** Erik Johnson

This course is specifically crafted to lay the groundwork for a future career as an electrician, blending online coursework with periodic hands-on sessions available depending on students' locations and schedules. Covering five main topics, the program commences with "Constructing Your Future," offering insights into construction trades apprenticeship programs, professional conduct, and safety considerations. It delves into personal financial management, emphasizing the significance of a safety mindset, and provides guidance on mitigating hazards in construction work.

The subsequent sections encompass crucial aspects such as understanding the workplace of an Electrical Worker, identifying tools and materials, and acquiring skills related to insulated conductors, anchors, and fasteners. "Applied Codeology" equips students with the ability to efficiently navigate the National Electrical Code, while "Direct Current Theory" delves into the essential electrical theory for working with DC circuits, emphasizing proficiency in algebra. The curriculum culminates with "Construction Drawings," a vital skill for Electrical Workers involving the interpretation of blueprints in various formats, including 2D and 3D drawings. Ideal for motivated individuals aspiring to become electricians. The course requires independent task management for completing lessons, reinforcing the importance of staying on track during class periods and/or completing work outside of class.

### COOPERATIVE WORK EXPERIENCE (17999)

**Grades:** 11, 12

Provides students with a regularly scheduled, supervised employment opportunity related to Trade and Industrial Occupations 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 Trade and Industrial Education program area. There shall be a training agreement among all partners regarding 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 assessing student progress and on-site visits by the instructor during the student's placement. NOTE:

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.

### CONSTRUCTION EXPLORATIONS (37020)

Fall/Spring Semester Online

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.

### BASIC GRADE & CONSTRUCTION MATH (37020)

Fall/Spring Semester Online

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.

### BASIC CONSTRUCTION EQUIPMENT FUNDAMENTALS (17200)

Fall/Spring Semester Online

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.

### BASIC MAINTENANCE OF MOBILE EQUIPMENT (17201)

Fall/Spring Semester Online

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.

# **GREAT WESTERN NETWORK (GWN)**

## **GWN ADMINISTRATION**

### **Bill Strasser**

GWN Director

Office: 701-226-2541

Bill Strasser@k12.nd.us

### **Amy Johnson**

WesternND CTC Powerschool Registrar  
and Marketing Coordinator

701-641-0569

amy.a.johnson@k12.nd.us

## **GWN TEACHERS**

### **Spanish**

Sandy Meidinger

Christie Anderson

Nicole Neumiller

### **German**

Martina Dvorak

### **Law and Accounting**

Jessica Hoff

### **Anatomy**

Karen Gordon

### **Art**

Courtney Halverson

Allison Muncaster

Amanda Schlieman

### **American Sign Language**

Jolene Hafner

**Additions or changes may be made based on enrollments received.**

## **Scheduling Procedure for 2024-25 School Year for ITV classes (hybrid ITV & full ITV):**

**Step 1:** (preliminary advertising of classes on GWN web site) : Take a look at the draft schedule on the GWN web site at this link : [www.gwn.k12.nd.us](http://www.gwn.k12.nd.us)

Determine the courses you would like to receive. (If you would like to have one of your teachers SEND a class, contact [bill.strasser@k12.nd.us](mailto:bill.strasser@k12.nd.us) )

A process is being established for 2024-25 that will allow for registration to be done more efficiently electronically. An announcement on this will be forthcoming. The Western Dakota (includes GWN) registration will once again be done by Amy Johnson [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us)

Once your school has registered its students, the ITV requests will be updated on the GWN draft schedule and recorded on the Western Dakota database. Please be cognizant of the starting & ending bell times for ITV classes when registering students. Students that come to class more than 10 minutes late or leave more than 10 minutes before class is done have a much more difficult time succeeding. (even though streaming of missed class time is available, they don't always take advantage of that resource)

**Step 2:** (Deadlines) The Western Dakota Registrar will be sending out the deadlines for having your students registrar. These deadlines will be used to determine whether or not a class has enough enrollment to offer it or if it needs to be canceled or combined.

## **Dual Credit Scheduling: Scheduling Procedure for 2024-25 School Year for ITV College classes (dual credit) from Bismarck State College (BSC) and Dakota College in Bottineau (DCB)**

Registration for ITV college dual credit classes that your students are interested in should be done directly to their college distance learning representative (see below) and not to the Western Dakota registrar, Amy. Once the students have registered, they will appear on the GWN Draft worksheet. If there are ITV classrooms in your building that you specifically want used for these classes, please email them to [bill.strasser@k12.nd.us](mailto:bill.strasser@k12.nd.us)

**Bismarck State College correspondence** — [jessie.meckle@bismarckstate.edu](mailto:jessie.meckle@bismarckstate.edu)

**Dakota College at Bottineau correspondence** - - - [stacy.allard@dakotacollege.edu](mailto:stacy.allard@dakotacollege.edu)

**Exclusive Point to Point Scheduling:** With teacher shortages throughout North Dakota, there are situations in which schools prefer to work beyond the scope of the GWN traditional ITV classroom setting and provided schedule. Schools may want to work directly with another school or with a former teacher that they have convinced to teach from their home (or a different school) exclusively to their students. This can be done in an existing ITV room or an available traditional classroom that will become "ITV temporarily configured". These classes do not fall under any GWN-Western Dakota registration guidelines. This type of class is between the two entities (teacher-school and/or school-school) and all financial and registration matters are handled amongst one another. The involvement of GWN is strictly setting up the endpoints (teachers room/laptop and remote site room) to accommodate the class so that it can operate as an ITV class independently. Please contact [bill.strasser@k12.nd.us](mailto:bill.strasser@k12.nd.us) if this is something that you would like to establish for the upcoming year.

## **Changes for the GWN Scheduling Procedure for 2024/2025:**

[https://docs.google.com/document/d/1wpRJbLztLy7CmLb9R4lU1dSSPbbM9QisO3NGoF\\_iIXs/edit](https://docs.google.com/document/d/1wpRJbLztLy7CmLb9R4lU1dSSPbbM9QisO3NGoF_iIXs/edit)

# Great Western Network Courses

## ACCOUNTING I (14010)

Grade: 9 - 12

1 Credit

Full Year

Students in Accounting I 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 into the course.

## AMERICAN SIGN LANGUAGE (ASL I - 06315, ASL II - 06316, ASL III - 06317, ASL IV - 06318)

Grade: 9 - 12

1 Credit

Full Year

Designed to introduce students to American Sign Language and culture. Learners in level I would operate in the Novice Low Performance Indicators of the North Dakota Indigenous and World language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators in Communication by the end of the course.

## ANATOMY (13021)

Grade: 9 - 12

1 Credit

Full Year

Anatomy presents an in-depth study of the human body and biological system. Students study such topics as anatomical terminology, cells, and tissues and typically explore functional systems, such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems.

## ART (ART I - 02020, ART II - 02021, ART III - 02022, ART IV - 02029)

Grade: 9 - 12

1 Credit

Full Year

Art focuses on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on). Still, some courses may focus on only one medium.



## **DEVELOPMENTAL ENGLISH (05011) (ENGLISH CREDIT RECOVERY)**

**Grade: 9 - 12**

**1 Credit**

**Full Year**

Developmental Reading/Writing allows students to focus on reading and writing skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension and writing skills up to the desired level or to develop strategies to read and write more efficiently.

## **GERMAN (GERMAN I - 06291, GERMAN II - 06292, GERMAN III - 06293, GERMAN IV - 06294)**

**Grade: 9 - 12**

**1 Credit**

**Full Year**

German I introduces students to the German language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course.

## **LAW (14090)**

**Grade: 9 - 12**

**1 Credit**

**Full Year**

Students in Business Law 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.

## **SPANISH (SPANISH I - 06211, SPANISH II - 06212, SPANISH III - 06213, SPANISH IV - 06214)**

**Grade: 9 - 12**

**1 Credit**

**Full Year**

Spanish I introduces students to the Spanish language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course.

All available ITV courses can be seen on the "Draft Schedule " link at [www.gwn.k12.nd.us](http://www.gwn.k12.nd.us)