



2026-2027

# COURSE CATALOG

and program information



## **CENTRAL REGIONAL AREA CAREER AND TECHNICAL CENTER (CRACTC)**

ADMINISTRATION AND TEACHERS.....	3
GENERAL INFORMATION.....	4
PROGRAM AREAS	
ADVANCED MANUFACTURING .....	7
AGRICULTURE .....	8
AVIATION .....	9
BUSINESS .....	10
FAMILY AND CONSUMER SCIENCE .....	11
GRAPHIC ARTS .....	14
HEALTH SCIENCE .....	15
INFORMATION TECHNOLOGY .....	18
MARKETING .....	22
MILITARY .....	24
TECHNOLOGY & ENGINEERING .....	24
WORK-BASED LEARNING .....	26

## **BAKKEN AREA SKILLS CENTER (BASC)**

ADMINISTRATION AND TEACHERS .....	28
GENERAL INFORMATION .....	29
PROGRAM AREAS	
AGRICULTURE .....	30
ARCHITECTURE & CONSTRUCTION .....	34
ENERGY .....	37
HEALTH SCIENCE .....	39
INFORMATION TECHNOLOGY .....	41
TRANSPORTATION .....	43
WORK-BASED LEARNING.....	45

## **ROUGHRIDER AREA CAREER AND TECHNICAL CENTER (RACTC)**

ADMINISTRATION AND TEACHERS .....	46
GENERAL INFORMATION .....	47
PROGRAM AREAS	
AGRICULTURE .....	48
ARCHITECTURE & ENGINEERING.....	50
BUILDING TRADES.....	51
BUSINESS .....	52
HEALTH SCIENCE .....	54
FAMILY AND CONSUMER SCIENCE.....	57
INFORMATION TECHNOLOGY.....	58
TRADE AND INDUSTRIAL .....	59
WORK-BASED LEARNING .....	59

## **GREAT WESTERN NETWORK (GWN ITV)**

ADMINISTRATION .....	60
GENERAL INFORMATION .....	61
COURSES .....	62

**PLEASE NOTE:** ALL registrations from each of the listed distance providers (CRACTC, BASC, RACTC, and GWN ITV) should be completed using the Western Dakota registration system:  
<https://registration.cRACTC.org/login> Please contact Amy Johnson [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us) if you have any enrollment questions. If you have any questions regarding programming, course requirements, etc., please contact the program director for the applicable provider.



***PREPARING TODAY'S STUDENTS FOR TOMORROW'S EXPERIENCES***

#### **CRACTC/CREA ADMINISTRATION**

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**Marketing:**  
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Lee Gullingsrud

**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

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

# 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 TOMORROW'S EXPERIENCES***

## CRACTC

The CRACTC is a State Career and Technical Education Department approved Career and Technical Education 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 delivers Career and Technical Education (CTE) courses through a hybrid instructional model that combines Interactive Television (ITV) and/or online virtual classrooms for daily instruction, and scheduled face-to-face application learning days each semester. This approach provides students with opportunities to complete a program of study and become CTE concentrators by earning two or more credits in a program area, helping to support their successful completion of North Dakota Choice Ready requirements.

## Registration Procedure:

The registration website: <https://registration.cRACTC.org/login> It can also be found on the CRACTC webpage, [www.cRACTC.org](http://www.cRACTC.org) The registration system asks for basic student information that we need to enter into the WesternND Infinite Campus. Indicate the selected course name, course term, along with the name, gender, email address and 10-digit State Student ID number 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 Infinite Campus site will also be requested prior to the start of school. Information needed includes: race and ethnicity. This information can be downloaded from the local schools' Infinite Campus site and sent as a spreadsheet to [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us).

**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. Bismarck State College (BSC) Fast-Track Coordinator will assist in the enrollment process. Contact information will be provided to students and schools prior to each semester. 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. Applications can be found at: [https://bnd.nd.gov/pdf/dual\\_credit\\_assistance\\_application.pdf](https://bnd.nd.gov/pdf/dual_credit_assistance_application.pdf)

**Must be in 10th Grade to enroll in dual credit courses.**

## **Deadline for Registration – April 30th, 2026**

**Lock-in date - May 8th, 2026**

Student enrollment fees for CRACTC/BASC/RACTC/GWN member schools:

**- \$300 per semester course      - \$600 for full year courses**

Student enrollment fees for Non-member schools:

**-\$400 per semester course      - \$800 for full year 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 member schools' 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 Infinite Campus. Grades are official at 9 am on the Monday following the end of each semester and then can be transferred to the home schools' Infinite Campus. Dual credit courses will follow the grade scale of the applicable college/university.

**Infinite Campus:** Logins and passwords are provided to each student and school facilitator or local Infinite Campus administrator. Infinite Campus questions/issues should be directed to CRACTC Infinite Campus administrator, Amy Johnson at [amy.a.johnson@k12.nd.us](mailto: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  $\frac{1}{2}$  credit if the student drops the class at the end of the first semester.

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

## Grievance Nondiscrimination and Anti-Harassment

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

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

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

## Grievance and Harassment Filing Procedure:

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

## IEP/504/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.



1929 N Washington St.  
Bismarck, ND 58501  
[www.CRACTC.org](http://www.CRACTC.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.



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)



1929 N Washington St.  
Bismarck, ND 58501  
[www.creand.org](http://www.creand.org)

# ADVANCED MANUFACTURING



## DC ELECTRONICS (17150) NEW

Grades: 11-12      0.5 Credit      Fall Semester

Online + 5 regional competency-based skills lab days

**Prerequisite: High School Credit Only:** Students **MUST** complete the *Intro to Advanced Manufacturing* course.

**Prerequisite: Dual Credit Enrollment:** The prerequisite is not required if the student is taking this course for dual credit. Please recognize that students taking this course for dual credit will be expected to follow all college level expectations and timeframes!

**Dual credit is available through Bismarck State College; ELEC 100/100L (5 college credits) toward a Mechatronics I Certificate.**

Get ready to power up your future in Advanced Manufacturing! In this online-hybrid course you'll explore how current, voltage, and resistance work together to bring electronic systems to life. You'll read and build from real schematics, investigate how DC circuits function, and apply your skills through interactive online lessons. Then, take your learning to the next level during five in-person learning lab days at Bismarck State College's brand-new Advanced Technology Center, where you'll test your circuits, use professional equipment, and experience college-level engineering in action. This course is a critical step toward earning stackable credentials, including the Mechatronics I Certificate or an AAS Degree in fields like Industrial Automation and Robotics, Energy Services and Renewable Generation, or Mechanical Maintenance Technology. **THE FIVE LAB DAYS ARE REQUIRED FOR HIGH SCHOOL OR DUAL CREDIT ENROLLMENTS REGARDLESS OF SCHOOL LOCATION; NO EXCEPTIONS, NO ALTERNATE ASSIGNMENTS PROVIDED!**

## AC ELECTRONICS (17150) NEW

Grades: 11-12      0.5 Credit      Spring Semester

Online + 5 regional competency-based skills lab days

**Prerequisite: High School Credit Only:** Students **MUST** complete the *Intro to Advanced Manufacturing* course.

**Prerequisite: Dual Credit Enrollment:** The prerequisite is not required if the student is taking this course for dual credit. Please recognize that students taking this course for dual credit will be expected to follow all college level expectations and timeframes!

**Dual credit is available through Bismarck State College; ELEC 120/120L (5 college credits) toward a Mechatronics I Certificate.**

Take your engineering skills to the next level as you dive into the dynamic world of AC circuits! In this exciting, college-level course, you'll explore decibels, complex numbers, RC/RL/RLC circuits, resonance, and both passive and active filters; core concepts that power everything from audio systems to advanced manufacturing equipment. Through interactive online lessons, you'll learn how AC systems behave, respond, and perform in real-world applications. Then, during required hands-on lab/lecture sessions, you'll bring the theory to life as you test circuits, analyze signals, and work with professional tools just like industry technicians and engineers. **THE FIVE LAB DAYS ARE REQUIRED FOR HIGH SCHOOL OR DUAL CREDIT ENROLLMENTS REGARDLESS OF SCHOOL LOCATION; NO EXCEPTIONS, NO ALTERNATE ASSIGNMENTS PROVIDED!**

# AGRICULTURE

## WELDING AND FABRICATION I (01046)

Grades: 10-12      0.5 Credit      Fall Semester

### Online + 5 regional competency-based skills lab days

Students are expected to attend 4–6 scheduled face-to-face, hands-on learning days as part of this course. Location will be within the CRACTC membership region and will be based on geographic locations of enrolled students.

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 (01047)

Grades: 10-12      0.5 Credit      Spring Semester

### Online + 5 regional competency-based skills lab days

Students are expected to attend 4–6 scheduled face-to-face, hands-on learning days as part of this course. Location will be within the CRACTC membership region and will be based on geographic locations of enrolled students.

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

# AVIATION



## AVIATION I (17812)

**Grades: 10-12      1 Credit      Full Year**

**Online + 2 regional competency-based skills lab days per semester**

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 + 2 regional competency-based skills lab days per semester**

**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.



## AVIATION MECHANICS (17820)

**Grades: 10-12      1 Credit      Full Year**

**Online + 2 regional competency-based skills lab days per semester**



If you love working with your hands and have a passion for mechanics, the Aviation Mechanics course is the perfect way to jumpstart your career in the high-wage, high-demand aircraft maintenance profession. This hands-on program follows the latest FAA Mechanic Airman Certification Standards (ACS), focusing on the general knowledge, skills, and risk management strategies needed for FAA mechanic certification—without covering airframe or powerplant subjects. You'll learn the fundamentals of aviation systems, tools, and safety practices, preparing you for real-world maintenance work. Plus, you'll have the opportunity to earn the ATEC General Aviation Maintenance Credential, proving your expertise and dedication to the field. If you're ready to turn your mechanical skills into a high-demand career, this course is your first step!

# BUSINESS

## BUSINESS MANAGEMENT (14231)

Grades: 11 - 12      0.5 Credit      Fall Semester

**Online + 1 regional competency-based skills lab day**

This course transforms traditional business principles into real-world applications. From planning and organizing projects to building strong teams and making impactful decisions, you will gain practical experience in what it takes to lead effectively in today's dynamic workplace. Whether you are planning to run your own business, lead a team, or simply stand out in any future career, this course gives you the beginning tools and confidence to succeed.

## BUSINESS MANAGEMENT II (14232) NEW

Grades: 11 - 12      0.5 Credit      Spring Semester

**Online + 1 regional competency-based skills lab day**

This course transforms traditional business principles into real-world applications. From planning and organizing projects to building strong teams and making impactful decisions, you'll gain practical experience in what it takes to lead effectively in today's dynamic workplace. You'll explore how businesses are structured, how managers motivate and support people, and how ethical decision-making shapes modern organizations. Dive into hands-on activities focused on human resources, financial decision-making, industry trends, markets and prices, and the role of organized labor. You'll also learn how technology and information management drive smarter operations in today's fast-moving world. Whether you dream of running your own business, leading a team, or simply standing out in any future career, this course gives you the tools, insights, and confidence to succeed.

## BUSINESS COMMUNICATIONS (14060) NEW

Grades: 11 - 12      0.5 Credit      Fall Semester

**Online + 1 regional competency-based skills lab day**

Step into a course that helps you communicate with confidence, everywhere from the classroom to your first job! In Business Communications, you'll sharpen your writing, speaking, listening, and teamwork skills through real-world projects, digital tools, and interactive online modules. Learn how to craft clear and professional messages, present your ideas with impact, and collaborate like a pro in today's fast-paced workplace. Whether you're launching a business, stepping into leadership, or simply want to level up your communication game, this course gives you the skills to stand out.

## BUSINESS LAW (14090)

Grades: 11 - 12      0.5 Credit      Spring Semester

**Online + 1 regional competency-based skills lab day**

Discover how the laws that shape our society impact your daily life and future ambitions within the business world. In Business Law, you will explore our legal system, learning how laws are developed, enforced, and applied in real-world scenarios including ethics contracts, personal and commercial property, sales, risk management, and much more! Whether you are planning to own a business, pursue a legal career, or just want to make smarter decisions, this class give you practical knowledge you can use in your future.

# FAMILY AND CONSUMER SCIENCE

## FAMILY AND CONSUMER SCIENCE I (09022)

Grades: 9 - 12      1 Credit      Full Year

Online + 1 regional competency-based skills lab days per semester

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.

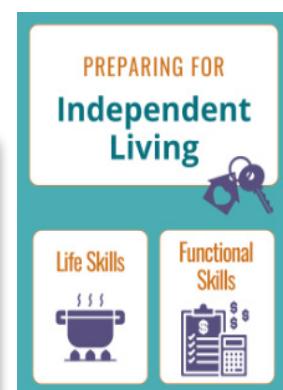
## INDEPENDENT LIVING (09025)

Grades: 10 – 12      0.5 Credit      Fall or Spring Semester

Online + 1 regional competency-based skills lab day

For a student who is looking forward to being on their own, taking this course will help you avoid some common problems. Learn how to make big decisions,

build a resume that will help you stand out, find ways to discover a career you enjoy, learn how to handle your money (taxes, investing, loans and more)! As well as, insurance, making large purchases like a car or a home, renting, finding a roommate, making healthy food choices, and proper clothing care are some of the topics covered in this class designed to make living independently easier!



## CHILD DEVELOPMENT (09026)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 1 regional competency-based skills lab day

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 + 1 regional competency-based skills lab day**

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 + 1 regional competency-based skills lab day**

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.

## HOUSING AND INTERIOR DESIGN (09133)

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

### **Online + 1 regional competency-based skills lab day**



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).

## NUTRITION AND WELLNESS (09137)

**Grades: 10 – 12      0.5 Credit      Fall Semester**

### **Online + 1 regional competency-based skills lab day**

This course is designed for all students concerned about nutrition and fitness and will explore such topics as sports nutrition in relation to performance, decision making and personal goal setting and stress management in relation to personal needs. Meal planning, fast foods, restaurant dining, family practices, genetically altered foods, weight loss and gain and current nutrition guidelines may be components of this course. Students will learn to read and interpret labels in relation to their dietary needs. Personal wellness and a healthy lifestyle will be the basis for lab experiences. There is a possibility of additional food expenses. Strongly encourage that either FACS I or Independent Living be taken prior.

## EXPLORING THE TEACHING PROFESSION I (09041)

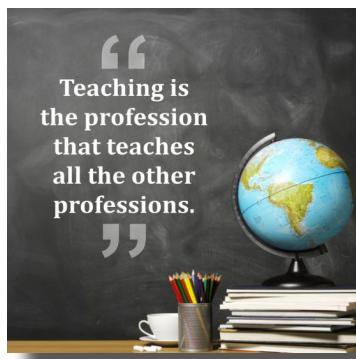
Grades: 11 - 12      0.5 Credit      Fall Semester

Online + 1 regional competency-based skills lab day

Have you had a teacher make a positive impact on your life? Have you ever thought about possibly becoming a teacher yourself? 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/region.**



## EXPLORING THE TEACHING PROFESSION II (09042)

Grades: 11 - 12      0.5 Credit      Spring Semester

Online + 1 regional competency-based skills lab day

**Prerequisite: Exploring the Teaching Profession I**

**Free Dual Credit through a grant at the University of Mary will be available for Spring Semester. Must be enrolled in both Fall and Spring Semesters to qualify.**

Building on the foundational concepts introduced in Exploring the Teaching Profession I, this second-semester course takes students deeper into the art and science of effective teaching. Students will explore advanced instructional strategies, lesson design models, and formative and summative assessment practices that drive meaningful student learning. Emphasis will be placed on classroom management theories, positive behavior supports, and creating inclusive, culturally responsive learning environments. Through structured observations, micro-teaching experiences, and reflective practice, students will apply professional teaching techniques and analyze real classroom scenarios. This course is ideal for students interested in education careers and seeking authentic, hands-on preparation for future teacher education programs. Schools and/or students may need to purchase additional materials or supplies for this course (approx. cost per student: \$30–50).

**Work-Based Learning options for additional credit are available if a student completes both Exploring the Teaching Profession I & II. Students who wish to continue with classroom learning experiences may sign up for a work-based learning experience. For more information please contact [kimberly.jensen@k12.nd.us](mailto:kimberly.jensen@k12.nd.us)**

**\*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/region.**

# GRAPHIC ARTS

## GRAPHIC DESIGN AND PHOTOGRAPHY I (17072)

Grades: 10 - 12      1 Credit      Full Year

### Online + 1 regional competency-based skills lab day per semester

This intro course covers the basics of graphic design and photography. Students will learn key design principles and photo composition, capturing their own images and enhancing them with Adobe Photoshop. They'll experiment with digital collages, double-exposure effects, and more. Students will also use Adobe Illustrator to create posters, logos, and character designs while developing their skills in layout and visual communication, setting the stage for Graphic Design & Photography 2.

## GRAPHIC DESIGN AND PHOTOGRAPHY II (17073)

Grade: 11 - 12      1 Credit      Full Year

### Online + 1 regional competency-based skills lab day per semester

#### *Prerequisite: Graphic Design and Photography I*

Building on the skills from Graphic Design & Photography 1, this advanced course helps students refine their design and photography abilities. Students will dive into more complex design principles, advanced layouts and photo editing. Projects include creating branding packages, multi-layered digital compositions, and professional designs for real-world use. Using Adobe Photoshop and Illustrator, students will work on projects that prepare them for a career in design and photography while building a strong portfolio.



# HEALTH SCIENCE



## HEALTH SCIENCE I (07033)

Grades: 10 - 12            1 Credit            Full Year

Online OR 4th period ITV- 11:03-11:53 CT + 2 regional competency-based skills lab days per semester

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

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.

## HEALTH SCIENCE II (07035)

Grades: 11 - 12            1 Credit            Full Year

Online + 1 regional competency-based skills lab day per semester

***Prerequisite: Health Science 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

**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.

## CERTIFIED NURSING ASSISTANT (07032)

Grades: 11 - 12

0.5 Credit

Fall Semester

Online + 5 regional competency-based skills lab days

**Prerequisite: Health Science I from a ND State Approved CTE Center**

**Dual credit is available through Bismarck State College (NURS 100).**

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 all MANDATORY hands-on days.

**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.**



## Emergency Medical Technician (07045)

Grade: 12

1 Credit

Full Year

Online + 5 regional competency-based skills lab days per semester



**Prerequisite: Certified Nursing Assistant or Emergency Medical Responder (EMR)**

**Additionally, must complete a ride-along with an approved EMT provider PRIOR TO STARTING CLASSES NEXT FALL to ensure student is committed to all components of the course. -Please contact instructor [amy\\_kruger@bismarckschools.org](mailto:amy_kruger@bismarckschools.org) for more information and ride-along form!**

**Dual Credit will be available through Bismarck State College during Spring semester (must take full year course to qualify). Please recognize that students taking this course for High School or College dual credit will be expected to follow all college level expectations and timeframes; no alternative assignments provided!**

Take another step toward an exciting healthcare career by enrolling in the Emergency Medical Technician (EMT) course! This online/hybrid program teaches life-saving skills like CPR and prepares you to handle real emergencies such as heart attacks, auto accidents and more. You will train with advanced equipment under the guidance of experienced paramedics and gain valuable insights from professionals in the field. Upon successful completion of the course, you will be eligible for ND State licensure testing and have the knowledge and experience to explore a variety of healthcare careers. We strive to work with qualified regional ambulance services for the hands-on skills training requirements in order to help reduce student travel and connect students with their local ambulance services. Don't miss this opportunity to build your future while learning how to make a real difference in your local community and region!



**TEACHER VIRTUAL CHECK-INS, SKILLS LAB DAYS & AMBULANCE RIDE ALONGS ARE REQUIRED FOR HIGH SCHOOL OR DUAL CREDIT ENROLLMENTS; NO EXCEPTIONS, NO ALTERNATE ASSIGNMENTS PROVIDED!**

## Firefighter I (07100) NEW

Grades: 11 - 12

1 Credit

Full Year

Online + 4 regional competency-based skills lab days per semester

**PLEASE NOTE: This is a first-year pilot course that will be limited to ONE section of 20 students. With enrollment capped at 20 students, this course is reserved for highly committed students with all online learning and are ready for challenge, responsibility, and unforgettable real-world experience. Each semester includes five MANDATORY in-person skills days (locations TBD based off of location of enrolled students); no alternative assignment will be given. Students must be at least 16 years old in order to fully participate in skills days.**

Step into the world of real-life heroes! This yearlong Firefighter I course blends dynamic online learning with high-energy, hands-on training that puts you right into the action. Students will explore fire behavior, firefighter safety, equipment operations, rescue techniques, hazardous materials awareness, and the teamwork required to protect lives and property. Each semester includes five MANDATORY in-person skills days (locations TBD), where you'll gear up, practice skills within real-life scenarios, and train alongside experienced firefighters. Completion of all course requirements may lead to industry level firefighting certification opportunities!

# INFORMATION TECHNOLOGY

## INTRODUCTION TO INFORMATION TECHNOLOGY (27101)

Grades: 9 - 12

0.5 Credit

Fall Semester

Online + 1 regional competency-based skills lab day



Start your journey into the fast-paced world of tech. This course is the gateway to our entire IT department, giving you a broad look at the industries that power our modern life. You will explore the foundations of computer hardware, software development, networking, and digital citizenship. Through interactive projects and hands-on labs, you will discover which tech path fits you best while building the essential digital skills needed for any modern career. This is where your future in technology begins!

## COMPUTER HARDWARE & OPERATING SYSTEMS (27219)

Grades: 9 - 12

0.5 Credit

Spring Semester

Online + 1 regional competency-based skills lab day

**Prerequisite – *Introduction to Information Technology***

**Dual Credit option available. Must be in 10th Grade and 16 years of age to enroll in dual credit courses.**

Stop wondering what's inside the box and start building it yourself. Whether you want to build a high-end gaming PC or understand the tech that powers your world, this course gives you the keys to the kingdom. You'll get hands-on experience assembling, configuring, and troubleshooting hardware from the ground up. You'll master the skills that power the digital world and get a head start on your degree. Don't just be a user—become a builder!

## NETWORKING FUNDAMENTALS (27266)

Grades: 9 - 12

0.5 Credit

Spring Semester

Online + 1 regional competency-based skills lab day

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

Ever wonder how the internet actually works? In this course, you'll stop wondering and start building. Using professional tools like Cisco Packet Tracer, you'll design, secure, and troubleshoot the networks that power everything from smart homes to global businesses. Through hands-on labs in a virtual cyber range, you'll master the languages of the web while learning the defense tactics needed to protect network architecture from cyberattacks. You'll gain the skills required to configure and defend the digital backbone of the modern world. If you want to know how the world connects, this is where you start!

## CYBERSECURITY I (27280)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online + 1 regional competency-based skills lab day

**Dual credit is available through Bismarck State College each semester – for Spring Semester students MUST have successfully completed the Fall semester curriculum. Must be in 10th Grade to enroll in dual credit courses.**

In an era of constant digital threats, cybersecurity is the ultimate modern skill. This course provides a comprehensive deep dive into protecting our digital future—from mastering software security to the basics of cryptography. Through focused hands-on labs, you'll gain a unique perspective on how systems are both defended and breached. Build a professional foundation in one of the world's highest-demand fields and secure your data and your future all at once!

## CYBERSECURITY II (27280)

Grades: 10 - 12

0.5 Credit

Spring Semester

Online + 1 regional competency-based skills lab day

**NEW Prerequisite-Cybersecurity I**

**Dual credit is available through Bismarck State College each semester – for Spring Semester students MUST have successfully completed the Fall semester curriculum. Must be in 10th Grade to enroll in dual credit courses.**

Ready to take your cyber skills to the professional level? Cybersecurity II is where the theory meets the real world. This heavily lab-based course moves beyond the basics, giving you direct experience with advanced networking, Linux system administration, and the fascinating world of vulnerabilities and exploits. You'll learn exactly how professionals identify system weaknesses and how to build defenses to protect industry networks. You'll have a professional toolkit of skills to prove you're ready for the next level of tech. It's hands-on, high-tech, and the perfect final step in your cybersecurity journey!



## CODING WITH PYTHON (27123)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online + 1 regional competency-based skills lab day

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

Step into the world of one of the most popular and versatile programming languages on the planet. This course takes you from the basics of code to solving real-world challenges with logic and data. You'll master Python fundamentals like procedures, arrays, sorting, and creating classes. Plus, during our face-to-face sessions, you'll get the chance to put your skills to the test by programming robots to perform interactive tasks. Whether you want to build software or explore automation, you'll gain a professional toolkit to power your future in tech!

## CODING WITH JAVA - COMPUTER SCIENCE A (27125)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 1 regional competency-based skills lab day

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

Ready to master the language behind millions of devices and apps? Following the professional CSA (Computer Science A) platform, this course introduces you to the power of Java, focusing on the logical structures and problem-solving skills used by professional developers—including variables, decision structures, and looping. You'll also get hands-on with physical robots during our face-to-face week, applying your code to solve real-world challenges. You'll build a professional foundation in one of the industry's most essential languages, preparing you for advanced computer science and beyond!

## INTRODUCTION TO LINUX (27305) NEW

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + 1 regional competency-based skills lab day

*Dual Credit option available.*

Want to go beyond the basic desktop? Linux is the powerful operating system that runs the world's web servers, supercomputers, and the backbone of global cybersecurity. This course takes you from the basics of file management to the power of the command line. Using professional tools in a safe, virtual Cyber Range, you'll learn how to navigate systems, manage user security, and automate tasks through scripting. Whether you're interested in becoming a system administrator or a cybersecurity expert, you'll build the technical proficiency that top tech companies are looking for. Gain the skills to manage and secure the systems that power the digital age!

## INTRODUCTION TO ARTIFICIAL INTELLIGENCE (AI) (27290)

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + 1 regional competency-based skills lab day

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



Artificial Intelligence is changing the world—do you know how it works? This course pulls back the curtain on the most exciting frontier in technology. You'll explore how machines learn, perceive, and make decisions, gaining hands-on experience with the tools and concepts that power everything from voice assistants to autonomous systems. You'll build a solid understanding of AI ethics and real-world applications, giving you a massive head start in the most high-demand field of the 21st century. Join the AI revolution and learn to build the future!

## INTRODUCTION TO VIDEO GAME DESIGN (27130)

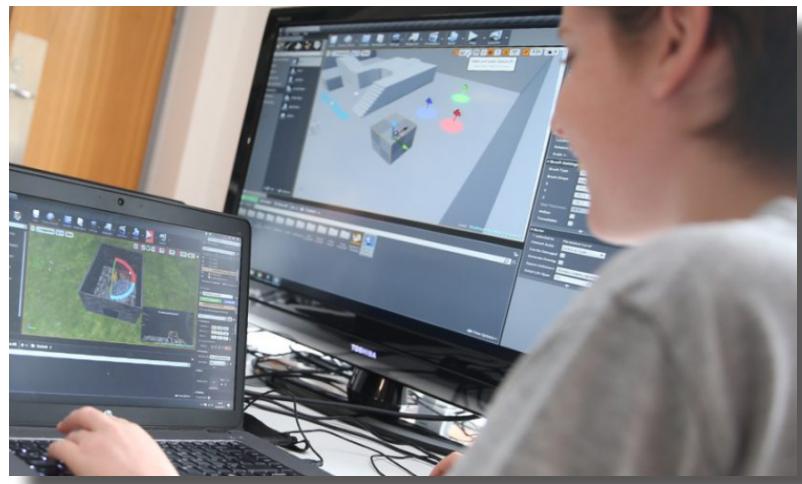
Grades: 9 - 12

0.5 Credit

Fall Semester

Online + 1 regional competency-based skills lab day

Stop just playing games and start building them! This course is your entry point into the gaming industry, where you'll learn to design and program using Flowlab's professional visual system. You'll master game logic, physics, and object interactions—all without needing to learn complex text-based coding first. From creating your own sprites to building challenging levels and scoring systems, you'll develop the same skills used by indie developers. The semester culminates in our Game-a-Palooza event, where you'll debut your original game and challenge your classmates to play it. If you have a creative vision for a game, this is where you bring it to life!



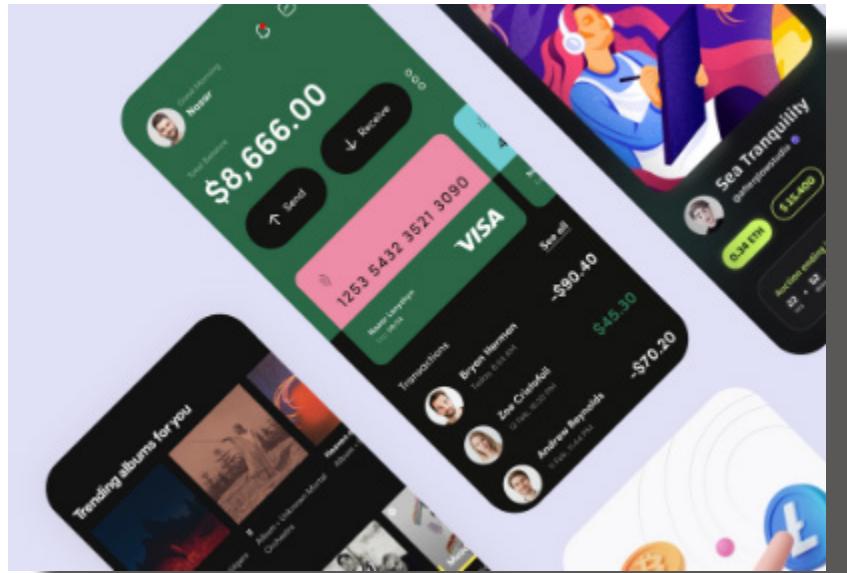
## INTRODUCTION TO MOBILE APP DESIGN (27128)

Grades: 9 - 12

0.5 Credit

Spring Semester

Online + 1 regional competency-based skills lab day



Stop just using apps and start building them! This course transforms you from a tech consumer into a mobile innovator using the professional MAD-learn platform. You'll dive into a 6-step design thinking process—Ideate, Plan, Design, Build, Test, and Launch—to create functional, dynamic apps from scratch. Whether you want to solve a community problem or launch the next big startup, you'll master the visual tools of app creation before diving into the code that powers them. Best of all, you'll have the chance to see your hard work go live by sharing your finished projects on the MAD Store. It's time to turn your app ideas into a reality!

# 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 + 1 regional competency-based skills lab day per semester

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 + 1 regional competency-based skills lab day

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 + 1 regional competency-based skills lab day**

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 + 1 regional competency-based skills lab day**

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 + 1 regional competency-based skills lab day**

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.

# MILITARY CAREERS

## CAREERS AND THE MILITARY (15052) NEW

Grades: 10 - 12      1 Credit      Full Year

Online + 4 regional competency-based skills lab days per semester

**PLEASE NOTE: This is a first-year pilot course that will be limited to ONE section of 20 students.**

Students are expected to attend three (3) scheduled face-to-face, hands-on learning days per semester as part of this course. Location will be within the CRACTC membership region and will be based on geographic locations of enrolled students.

Step into a course that bridges two worlds, civilian careers and military pathways! In this dynamic online/hybrid class, you'll explore how military training, values, and career fields connect directly to high-demand civilian jobs. From cybersecurity and aviation to healthcare, engineering, logistics, and leadership, you'll learn how the skills gained in service translate into real-world opportunities in every industry, while also getting to experience some real-life military training and applications. Whether you're considering military service, civilian employment, or both, this course helps you chart a purposeful future with the knowledge and skills to succeed in any direction you choose!

## EXPLORING MILITARY CAREERS

# 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 (11170) or Science credit (13150).*

Grades: 9 - 12      0.5 Credit      Fall Semester

Online + 1 regional competency-based skills lab day

Build, Design, and Solve Real-World Challenges is an exciting, hands-on, project-based course where you'll use Science, Technology, Engineering, and Math to tackle real-world problems. You'll design and prototype projects like bridges, catapults, assistive-reach devices, and parachutes using everyday materials, while also diving into CAD programming to bring your ideas to life with precision. Explore the Engineering Design Process as you create digital and physical models of structures like cantilevers and test their strength and functionality. Your success is all about creativity, effort, and teamwork. This course is an introduction to the basics of exciting STEM careers and empowers you to shape the future. Sign up today and start designing your world!



## STEM SEMINAR II

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

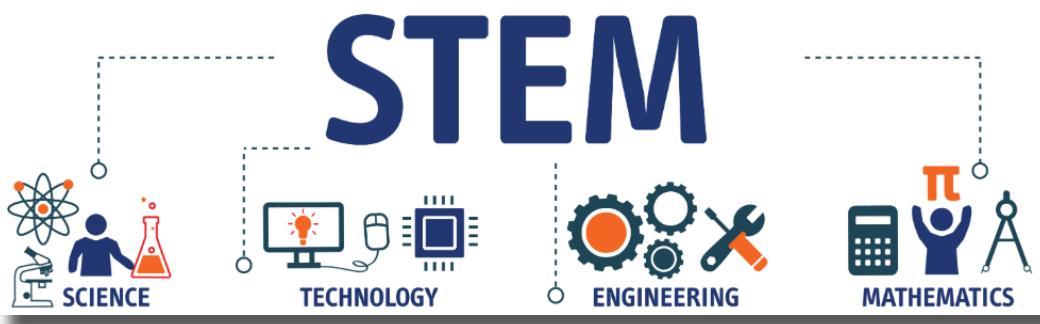
**Grades: 9 - 12**

**0.5 Credit**

**Spring Semester**

### Online + 1 regional competency-based skills lab day

Power Up Your Creativity and Explore the Future is a continuation of fall semester STEM I with hands-on, project-based course where you'll dive into energy, power, and agricultural engineering using Science, Technology, Engineering, and Math to solve real-world challenges. You'll tackle exciting projects like building mousetrap cars, simple motors, batteries, and even a "putt-putt" boat, while mastering the Engineering Design Process and exploring innovative STEM careers. Your success is based on creativity, teamwork, and effort.



## FOUNDATIONS OF ENGINEERING & TECHNOLOGY (10094)

**Grades: 9 - 12**

**0.5 Credit**

**Fall Semester**

### Online + 3 regional competency-based skills lab days

#### **Prerequisite: STEM SEMINAR I or II**

Discover your inner innovator with the Foundations of Engineering course! This exciting next step course from STEM I and II, empowers students in grades 10-12 to design, create, and bring ideas to life. Learn how to transform your creativity into real-world solutions through hands-on projects in manufacturing, construction, energy, and communication technologies. Explore cutting-edge topics, while gaining a deeper understanding of how engineering shapes society and impacts the environment. Whether you're dreaming of inventing the next big thing or just love solving problems, this course offers the skills and knowledge to turn your vision into reality. Enroll now and start building your future today!

\*Schools may 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 + 3 regional competency-based skills lab days

#### **Prerequisite: Foundations of Engineering & Tech**

This course is a continuation from the fall Foundations of Engineering I course. You will explore cutting-edge topics, while gaining a deeper understanding of how engineering shapes society and impacts the environment. Whether you're dreaming of inventing the next big thing or just love solving problems, this course offers the skills and knowledge to turn your vision into reality. Continue to expand your creativity into real-world solutions through additional hands-on projects. Enroll now and continue building your future learning in Engineering!

\*Schools may 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 + local competency-based skills lab days**

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 + local competency-based skills lab days

***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.



## **ADMINISTRATION**

### **Dr. Wayne Heckaman**

Director

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### **Scott Wisness**

Assistant Director

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### **Teresa Macklin**

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### **Justin Johnsrud**

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### **Amy Johnson**

WesternND CTC Infinite Campus Registrar  
and Marketing Coordinator

701-641-0569

amy.a.johnson@k12.nd.us

**Mission Statement:** The mission of the Bakken Area Skills Center is to empower individuals through career and technical education, fostering a skilled workforce that meets the evolving needs of our region. Together, we are cultivating strong partnerships with industry leaders, educational institutions, and our communities. Our goal is to provide accessible, high-quality education and training programs that fuel personal growth, economic development; creating a sustainable future for the Bakken region.

<https://www.basccte.com/>

## **TEACHERS**

### **Agriculture:**

Grace Delp

Caitlin Schilke

### **Aviation:**

Brett Olson



### **Automation & Engineering:**

Justin Johnsrud

Jayme Renner

Derek Roemmich

### **Information Technology:**

Kalsey Kronberg

Marty Waggoner

### **Welding:**

Kara Glenn

### **Work-Based Learning:**

Melissa Meyer

Jill Leach

### **Building Trades:**

Mark Wilson

### **Health Sciences:**

Pat Axtman

Zack Bebee

Julie Dragseth

Adrien Kathrein

Patti Stewart

### **Heavy Equipment Operator & CDL:**

George Adams

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

# General Information

## Deadline for Registration – April 30th, 2026

### **Lock-in date - May 8th, 2026**

Student enrollment fees for CRACTC/BASC/RACTC/GWN member schools:  
- \$300 per semester course      - \$600 for full year courses

**In-person: \$400 per semester course      \$800 per full year or block courses**

Student enrollment fees for Non-member schools:

**-\$400 per semester course      - \$800 for full year courses**

Student enrollment fees for Out of State Schools:

**-\$500 per semester 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:** Several BASC 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. Bismarck State College (BSC), Williston State College (WSC), and North Dakota State College of Science (NDSCS) Fast-Track Coordinator will assist in the enrollment process. Contact information will be provided to students and schools prior to each semester. **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.** Applications can be found at: [https://bnd.nd.gov/pdf/dual\\_credit\\_assistance\\_application.pdf](https://bnd.nd.gov/pdf/dual_credit_assistance_application.pdf)

**Must be in 10th Grade to enroll in dual credit courses.**

### **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).

### **Infinite Campus:**

Logins and passwords are provided to each student and school facilitator or local Infinite Campus administrator. Infinite Campus questions/issues should be directed to BASC Infinite Campus administrator, Amy Johnson at amy.a.johnson@k12.nd.us.

### **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.

### **Hands-on Learning Days:**

Hands-on learning days for MOST classes will be held the first Wednesday of each month at the BASC.

### **Withdrawal Policy:**

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

# AGRICULTURE

## INTRODUCTION TO AGRICULTURE (01011)

Grades: 9 - 12

0.5 Credit

Fall Semester

Online

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 within 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.



## FOUNDATIONS OF AGRICULTURE (01012)

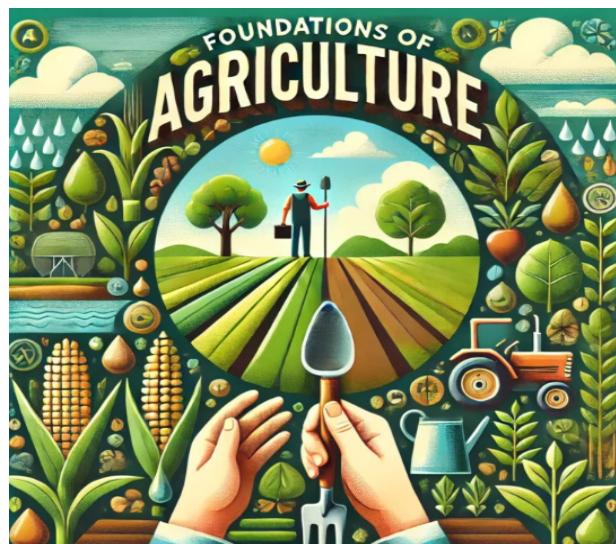
Grades: 10 - 12

0.5 Credit

Fall Semester

Online

This course provides students with a deeper understanding of the agriculture industry. Topics may include agronomy, livestock production, precision agriculture, and small animal care. Students in this course will learn more about FFA and leadership opportunities. Students will complete a work-based learning experience, such as a job shadow or other Supervised Agriculture Experience as part of this course.



## INTRODUCTION TO MEAT PROCESSING (01068)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 2 regional competency-based skills lab days

*Dual credit is available through Williston State College*

*Travel to the mobile meats lab at Williston State College will be the responsibility of the local school.*



This course provides an introduction to the meat processing industry, focusing on livestock meat primals, cuts, and grading. Students will gain hands-on experience with the principles and procedures involved in meat processing, fabrication, and sanitation. The curriculum is designed to familiarize students with the processing of agricultural products, including food, fiber, and materials, with an emphasis on their role in the global economy. In addition to technical knowledge, the course will also focus on the development of key professional skills, including personal communication, human relations, leadership, and the application of supervised agricultural experiences. Students will engage in practical learning opportunities, utilizing local school labs and/or the Mobile Meat Lab, which offers a dynamic, real-world setting for skill development.



## 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.*

## EQUINE SCIENCE (01062)

Grades: 10 - 12

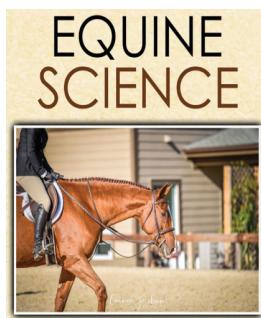
0.5 Credit

Spring Semester

Online

**Dual credit is available through Williston State College**

This course provides an in-depth review of the evolution and historical roles of the horse, exploring various breeds and the development of the modern-day Western equine industry. Topics covered include an introduction to equine anatomy and physiology, horse selection, nutrition, healthcare, and general management practices. The course is designed to offer students opportunities to learn, apply, and transfer their knowledge and skills in animal systems, with a specific focus on horses, donkeys, and mules. As part of the curriculum, students will engage in hands-on learning experiences, allowing them to develop the employability skills necessary for a successful career in equine science. These practical, laboratory-based activities will also emphasize the importance of professional work ethic, communication, and problem-solving.



## VET SCIENCE I (01067)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online

This introductory veterinary science course provides a foundational understanding of the key concepts and skills required for a career in veterinary medicine. Students will explore a wide range of topics, including the relationship between animals and society, the role of animals in research, veterinary laws and ethics, common veterinary medical equipment, veterinary terminology, basic canine and feline anatomy, external anatomy of livestock, and the circulatory, respiratory, and digestive systems. In addition to gaining a comprehensive overview of essential veterinary knowledge, students will have the opportunity to earn a certification upon successful completion of the course, further enhancing their qualifications in the field.

## VET SCIENCE II (01067)

Grades: 10 - 12

0.5 Credit

Spring Semester

Online

**Prerequisite: Vet Science I**

This comprehensive veterinary science course is designed to equip students with the essential knowledge and skills required to pursue a career in veterinary medicine. The curriculum covers a wide range of topics, including veterinary medical practices, vital signs, blood sampling, injections, mathematical applications, clinical examinations, laboratory and hospital procedures, surgical techniques, pharmacology, and more. In addition to gaining in-depth theoretical knowledge, students will have the opportunity to acquire hands-on experience. Upon successful completion of the course, students will also have the option to earn a certification, further enhancing their qualifications in the field.

## INTRODUCTION TO ANIMAL SCIENCE (01061)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online

***Dual credit is available through Williston State College***

Introduces students to the fundamentals of livestock and animal agriculture. It covers animal anatomy, nutrition, reproduction, genetics, health, and welfare while also teaching management practices for cattle, swine, sheep, goats, and other livestock. Students learn how animals' function, how they're raised, and how the livestock industry operates. This course blends online learning with practical, hands-on experiences to help students develop the scientific knowledge and real-world skills needed for careers or continued education in animal science, veterinary fields, and agricultural production. Students will have the opportunity to job shadow.

## LIVESTOCK PRODUCTION (01061)

Grades: 10 - 12

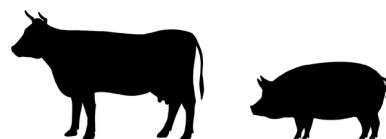
0.5 Credit

Spring Semester

Online

***Dual credit is available through Williston State College***

Introduces students to raising and managing livestock, including cattle, swine, sheep, goats, and poultry. It covers animal anatomy, nutrition, reproduction, genetics, health, and welfare, as well as management practices, housing, and handling. Students also learn about production systems, harvesting, marketing, and the economic and global aspects of the livestock industry. The course combines online lessons with hands-on activities to build scientific knowledge and practical skills for careers or further study in animal science, agriculture, and related fields. Students will have the opportunity to job shadow.



## SMALL ANIMAL CARE (01066)

Grades: 10 - 12

0.5 Credit

Fall Semester

Online

Teaches students how to properly care for and manage companion animals such as dogs, cats, birds, reptiles, and small mammals. It covers the basics of animal behavior, anatomy, nutrition, health, grooming, and common diseases. Students also learn introductory veterinary skills including handling animals, using medical equipment, and performing simple hospital or lab procedures. The course combines online instruction with hands-on activities to prepare students for practical careers in veterinary assisting, pet care, grooming, animal shelters, and other animal-focused industries. Students will have the opportunity to job shadow.



# ARCHITECTURE & CONSTRUCTION

## BUILDING TRADES I (17105)

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + 3 regional competency-based skills lab days

***Building Trades 1 is a Prerequisite for Building Trades 2.***

Building Trades provides an introductory orientation to the building trades that meets industry standards. The course includes various areas of Construction Math (fractions, area, volume, degrees of angles, etc...), Basic Shop and Job Site Safety, 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. Building Trades students may participate in the student organization SkillsUSA.



## BUILDING TRADES 2 (17100)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 3 regional competency-based skills lab days

***Prerequisite - Building Trades 1***

Successful completion of Building Trades 1 is required to take Building Trades 2. Building Trades 2 will expose students to the opportunities available in the construction industry, including occupations such as Carpentry,



Roofing, Plumbing, Heating, Ventilation and Cooling, Safety Supervision, and other occupations. Furthermore, Building Trades 2 will increase emphasis on Construction Math (adding/subtracting fractions, finding square footage, angles, material estimations, job quotes), problem solving, and employability skills. Students learn about the various processes and methods involved in construction projects and may engage in various builds. Students will learn about the risks and rewards of operating a construction business and construction planning. This course emphasizes job safety, responsibilities, qualifications, work environment, collaboration, and career paths within construction-based fields. Students will learn about various power tools and shop machines and become competent in their use. Building Trades 2 students may participate in the student organization SkillsUSA.

## OPERATING ENGINEERS PATHWAY

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.



**MUST BE TAKEN IN SEQUENTIAL ORDER**

### CONSTRUCTION EXPLORATIONS (37020)

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + a minimum of 1 regional competency-based skills lab day. Additional hands-on days available with preference to BASC member schools.

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 (37170)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + a minimum of 1 regional competency-based skills lab day. Additional hands-on days available with preference to BASC member schools.

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)

Grades: 11, 12      0.5 Credit      Fall Semester

Online + a minimum of 1 regional competency-based skills lab day. Additional hands-on days available with preference to BASC member schools.



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)

Grades: 11, 12      0.5 Credit      Spring Semester

Online + a minimum of 1 regional competency-based skills lab day. Additional hands-on days available with preference to BASC member schools.

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.

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

Grades: 11, 12

0.5 Credit

Fall and Spring Semester

Online + 1 regional competency-based skills lab day

The focus of this course is to give the students an understanding and skills to obtain a CDL certification. Students will start with the basics and move up to the finer points of the trade. Topics include required CDL Manual subjects such as General Knowledge, Air Brakes, Combination Vehicle, and Tanker and Doubles/ Triples endorsements. Also covered are hours of service, weight and balance, vehicle out-of-service regulations, and National Safety Council professional truck driver DDC. At the end of the semester, students will have been taught the skills to obtain a CDL permit and pass the CDL driver's test. Students must be 18 to obtain the CDL permit and earn the CDL license.



# ENERGY (AUTOMATION AND MANUFACTURING)

## AUTOMATION

### AUTOMATION 1 (FOUNDATIONS & PLTW) (37140 OR 10511)

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + 3 regional competency-based skills lab days

The Foundations of Automation course at the BASC is designed to teach industrial technology career foundation skills. Completion of this course ensures readiness for successful completion of the BASC Automation Pathway or for anyone interested in exploration of a technology based career. 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. The course will cover content and skills deemed important by industry professionals. Basic computer skills, hydraulics, pneumatics, and mechanical principles, GPS and GIS, electronics, safety, and other concepts. Students will gain a better understanding of career opportunities in the area, become aware of the education, training, and skills needed for employment in the industry. Limited modules are available to non-member schools, so contact BASC administration if interested.



### AUTOMATION 2 (FUNDAMENTALS) (17113)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 3 regional competency-based skills lab days

**Prerequisite: Automation 1 (Foundations)**

The Fundamentals of Automation course at the BASC is designed to teach the core concepts of industrial automation. The course is a hands-on study of the physical aspects of automation including system wiring, component interfacing, process control, and circuit design and documentation. It will ensure the readiness for the digital aspects of automation to be studied in Automation 3. Students will gain a better understanding of career opportunities in the area, become aware of the education, training, and skills needed for employment in the industry, and may have the opportunity for job shadowing and work experience. Limited modules are available to non-member schools, so contact BASC administration if interested.



## **WELDING 1 (FOUNDATIONS) (17235)**

**Grades: 10 - 12      0.5 Credit      Fall Semester**

**Online + 3 regional competency-based skills lab days**

This course prepares students for an entry-level position as a welder. Students will work towards assigned competencies to find employment and/or receive a certificate. The Welding Pathway emphasizes responsibilities, qualifications, work environments, safety practices, and career pathways within construction-related fields, aligned with regional industry standards.

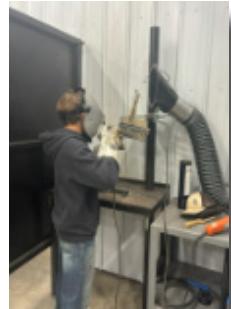
## **WELDING TECHNOLOGY 2 (17236)**

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

**Online + 3 regional competency-based skills lab days**

***Prerequisite - Welding 1 (Foundations)***

Students learn the various welding processes: 1G-4G 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. General shop safety and theory of each weld process along with blueprint reading, weld symbols, weld joints and positions, and properties of metal are studied. Students will receive advanced training to use Mastercam to be able to use the Plasma table. Students will progress through different types of welding each semester. Students may also participate in the student organization SkillsUSA as well as participating in other weld competitions.



# HEALTH SCIENCE

## INTRODUCTION TO HEALTH PROFESSIONALS (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.

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

### (07034)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

Online/ITV + 1 regional competency-based skills lab day per semester

Students can take it online any period and watch the recording.

**Prerequisite: An Anatomy class is recommended**

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 with certifications through National Federation of State High School Associations (NFHS).



## HEALTH SCIENCE I (07033)

Grades: 10 - 12

1 Credit

Full Year

Online + 1 regional competency-based skills lab day per semester

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.

## MEDICAL TERMINOLOGY (07036)

Grades: 10 - 12

0.5 Credit

Fall or Spring Semester

Online

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.

## CERTIFIED NURSING ASSISTANT (07032)

Grades: 11 - 12

0.5 Credit

Fall or Spring Semester

Online + 3 regional competency-based skills lab days



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 MANDATORY 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.



## PHARMACY TECH SUPERVISED OCCUPATIONAL EXPERIENCE (07075)

Grades: 11 - 12

2 Credit/Block required

Fall and Spring Semester

*Preferred prerequisite: Health Science I or Introduction to Healthcare and/or Biology or other science, other healthcare courses recommended.*



**This class is only available to BASC member schools.**

Delivery Method: Face-to-face / Online through NDSCS Commitment Statement Required for Registration. Provides students with module-based training needed for Pharmacy Technician. Course may involve off-site training hours concurrent with classroom

Technician board exam to acquire state certification. **Course requires partnership with a local pharmacy for students to be able to gain practicum hours.**

# INFORMATION TECHNOLOGY

## IT FUNDAMENTALS (INTRODUCTION TO PROGRAMMING LANGUAGES) (27120)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

### Online

This course will provide students with a solid foundation for understanding the fundamental concepts of programming languages. It will include coverage of concepts and constructs from languages like C#, JAVA™, JavaScript™, Perl, PHP, Python, Ruby, XHTML, XSLT, and JSP.

## INTERNET OF THINGS (27111)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

### Online

Internet of Things (IoT) Fundamentals provides students with a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate the students to apply creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, networking, security, data analytics, and business. Outcoming students can ideate, design, prototype, and present an IoT solution for an identified business or society need.

## COMPUTER SOFTWARE APPLICATIONS (27102)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

### Online

Semester modules in computer applications may include a broad-based overview of office suites or skills leading to high-level competencies in spreadsheets, databases, presentations, desktop publishing, etc. Students will gain skills at the proficient or expert level in office suite software. Successful attainment of competencies within each office suite prepares students for industry certification, such as MOUS (Microsoft Office User Specialist). A Cybersecurity certified teacher teaches this class and meets your school's cybersecurity requirement for graduation. A unit in Cybersecurity will be taught to fulfill the requirement.

## MOBILE APPS DEVELOPMENT (27128)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

### Online

This course will introduce students to mobile application development and management using various commercial and open-source software. Topics to be included in the course are (1) Installation and modification of application; (2) Code modification; (3) Design and implementation; (4) Database systems management; (5) Security; and (6) Customer Service.

## INTRODUCTION TO ESPORTS (27130)

Grades: 9 - 12

0.5/1 Credit

Fall or Spring Semester/Full Year

### Online

Intro to Esports is designed to introduce students to Esports. Students will produce digital and technology artifacts to lead to the hosting of an esports event at their high school.

This curriculum can be taught and implemented as an introduction to technology course, multimedia coursework, or as part of a local or school esports club. In this course, students will gain the following skills: Digital Media Design, Human Nutrition & Health, Streaming & Shoutcasting, Video & Audio Production, Business Development, and Event Management. This course will include a unit on Cyber Security that contributes toward meeting the Cyber Security graduation requirement if added to your local school district Cybersecurity plan and approved by your local school board. Upon completion of the first semester Intro to Esports course, students may continue a second semester of Esports: Inside the Games.



## GAME: IT (27130)

Grades: 9 - 12

0.5/1 Credit

Fall or Spring Semester/Full Year

### Online

Welcome to the GAME:IT course! GAME:IT is a game design course that will engage students with project-based learning and get them excited about computer programming! Students will go from simple “drag-n-drop” programming to writing code. The course also covers the basic math & physics concepts used in game development and how the engineering design cycle is used to design games and to solve problems. This course will include a unit on Cyber Security that contributes toward meeting the Cyber Security graduation requirement if added to your local school district Cybersecurity plan and approved by your local school board. Upon completion of the first semester GAME:IT course, students may continue a second semester Advanced GAME:IT course.

# TRANSPORTATION

## Automotive Technology 1 (17029)

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

**Online + 3 regional competency-based skills lab days per semester**

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. Auto students may participate in the student organization SkillsUSA.

## Aviation 1 (17812)

Grades: 10-12      1 Credit      Full Year

**Online + 3 regional competency-based skills lab day per semester**

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. Students will have the opportunity to job shadow through the local airport and use flight simulators.



## Aviation 2 (17813)

Grades: 11-12      1 Credit      Full Year

**Online + 3 regional competency-based skills lab day per semester**

**Prerequisite: Aviation 1**

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. Students will have the opportunity to job shadow through the local airport and use flight simulators.



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

**Grades: 10-12                    0.5 or 1 Credit**

**Fall or Spring Semester/Full Year**

**Online + 3 regional competency-based  
skills lab days per semester**

The Unmanned Aircraft Systems course will teach students a basic understanding of recreational and commercial unmanned aircraft operations. They will identify the responsibility and authority of the remote PIC, discuss rules of UAS operation, and understand the significance of airspace Classes B, C, D, E, and G as they pertain to UAS. Identify special-use airspace where UAS usage may be prohibited. Understand weather and how it affects the flight of UAS. Understand general loading and performance data and airport operations. When students complete this course, they will have a general understanding and knowledge of the operation and uses of UAS as they pertain to the world of Aviation.



# Work-Based Learning (WBL)

## Cooperative Work Experience (Work-Based Learning)

**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 Trade CWEs (17999)**

**Grades: 11, 12      0.5 or 1 Credit      Fall or Spring Semester**

**Online, In-person and 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.

## TRADES CAPSTONE (17950)

**Grades: 11, 12      0.5 Credit      Fall and/or Spring Semester**

Students who complete all courses within a BASC pathway have the opportunity to complete a capstone their junior or senior year in preparation for their chosen career path. Students will have the opportunity to choose from stackable options available to them, which may include certification options in H2S, Medic First Aid, Osha 10 or 30, Commercial Drivers License, trade specific projects, among others. Students may also receive on-the job training in a work-based learning experience such as an internship or apprenticeship. Students may have the opportunity for dual credit through a post-secondary institution.





## **ROUGHRIDER AREA CAREER & TECHNOLOGY CENTER**

The Roughrider Area Career and Technology Center will provide high-quality career and technical education, with hands-on, real-world experiences, while developing essential skills, confidence, and clear pathways to future success for all consortium students.

### **RACTC ADMINISTRATION**

**Stephen Kessler**  
RACTC Director  
stephen.kessler@k12.nd.us  
701-870-2206

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

### **GOVERNING BOARD**

Beach-Carrie Zachmann (Chair)  
Belfield-Kara Hrabik  
Bowman-Laura Wallman  
Dickinson-Brent Seaks  
Glen Ullin-Chasity Wood  
Hebron-Holly Martinson  
Hettinger-Ben Laufer  
Killdeer-April Dutchuk  
Mott/Regent-Heather Kouba  
New England-Amanda Seymour  
Richardton/Taylor-Dave Olson  
Scranton-Kelly Pierce  
South Heart-Jule Walker

### **RACTC TEACHERS**

**Agriculture:**  
Misty Steeke  
Karagan Damjanovich

**Business Education/IT:**  
Shelly Christensen

**Trade and Industry:**  
Erik Johnson-Electrical  
Stephen Kessler-Welding

**Health Sciences:**  
Bobbi Schneider  
Adrien Kathrein

**Operating Engineers Pathway:**  
George Adams

**Career Development Counselors**  
Beach-Arielle Schneider  
Belfield-Emily Hanson  
Bowman-Mia Stafford  
Glen Ullin-Cami Jo Krueger  
Hebron-Jared Bollom  
Hettinger-Krista Olson  
Killdeer-Nikki Martin  
Mott/Regent-Kari Mayer  
New England-Kristi Voth  
Richardton-Taylor-Sara Scott-Singer  
Scranton-Lea Doerr  
South Heart-Bobbie Olson

# General Information

## Deadline for Registration – April 30th, 2026

Lock-in date - May 8th, 2026

Student enrollment fees for CRACTC/BASC/RACTC/GWN member schools:

**- \$300 per semester course      - \$600 for full year courses**

Student enrollment fees for Non-member schools:

**-\$400 per semester course      - \$800 for full year courses**

### **Dual Credit:**

There are some RACTC courses that have Dual Credit Opportunity. Please communicate with your RACTC course instructor or counselor for Dual Credit information.

### **Grade Scale:**

The RACTC 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. RACTC grades are posted on the RACTC Infinite Campus. 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.

### **Infinite Campus:**

Logins and passwords are provided to each student and school facilitator or local Infinite Campus administrator. Infinite Campus questions/issues should be directed to RACTC Infinite Campus administrator, Amy Johnson at [amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us).

**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.

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

# AGRICULTURE

## LIVESTOCK PRODUCTION (01061)

Grades: 10 - 12      0.5 Credit      Fall Semester

### Online +1 regional competency-based skills lab day

Livestock Production is a fully online, asynchronous course that prepares students for careers in animal science and livestock production, including beef and dairy cattle, swine, sheep, goats, and poultry. Students study anatomy and physiology, nutrition, reproduction, health, genetics, and management practices used in modern animal agriculture. The course covers livestock breeding, emerging technologies, commodity markets, and the U.S. role in global production. Students practice animal identification, safe restraint, basic veterinary procedures, and disease prevention and control. This class provides a strong foundation for students interested in production agriculture, veterinary science, and related fields.

## VET SCIENCE (01067)

Grades: 10 - 12      0.5 Credit      Spring Semester

### Online +1 regional competency-based skills lab day

Vet Science is a fully online, asynchronous course, designed to introduce students to careers in animal science and veterinary-related fields. Students explore veterinary practices for both large and small animals, including animal health, anatomy, behavior, nutrition, disease prevention, parasites, and basic clinical care. The course emphasizes animal welfare, safety, biosecurity, and the ethical and legal responsibilities of veterinary professionals while building critical thinking and problem-solving skills through virtual labs, case studies, and applied projects. This flexible, asynchronous format allows students to work at their own pace while preparing for post-secondary education or careers in veterinary science and animal care.

## WILDLIFE AND NATURAL/ ENVIRONMENTAL RESOURCES (ENR) (01063)

Grades: 9 - 12      0.5 Credit      Fall Semester

### Online + 1 regional competency-based skills lab day

In this course, you will explore the major ideas that shape modern agriculture, wildlife management, and natural resource conservation. A major part of this course involves interactive labs and inquiry-based investigations. You will conduct wildlife-focused labs such as scoring antlers, identifying large game animals, and studying upland bird species. These labs will help you better understand wildlife behavior, habitat needs, and management practices used by professionals in the field. You'll also use technology and computer applications that are essential in modern agriculture and natural resource careers.



## AGRONOMY (01025)

Grades: 9 - 12      0.5 Credit      Spring Semester

Online + 1 regional competency-based skills lab day

**Dual credit is available through Dickinson State University (World Food Coops)**

Agronomy/Plant Science is a comprehensive course designed to introduce students to the scientific principles and real-world practices involved in crop production, plant growth, and sustainable land management. Students will explore the biology of plants, soil science, crop classification, plant health, and the environmental factors that influence agricultural systems in North Dakota and beyond. Emphasis is placed on understanding how producers manage resources, improve crop yield and quality, and make decisions using data-driven, research-based agronomic practices.

## SMALL ANIMAL CARE (01066)

Grades: 10 - 12      0.5 Credit      Fall Semester

Online + 1 regional competency-based skills lab day

This course introduces students to the care and management of small animals, including small mammals, reptiles, amphibians, birds, dogs, and cats. Students learn responsible ownership, domestication, industry impacts, and safety hazards such as disease transmission and chemical handling. The course covers animal rights and welfare, species characteristics, breeds, housing and habitat needs, nutrition, and safe handling techniques. Students also use laboratory equipment to perform basic procedures and apply practical skills in small animal care.

## EQUINE SCIENCE (01062)

Grades: 10 - 12      0.5 Credit      Spring Semester

Online + 1 regional competency-based skills lab day

This course provides hands-on skills and foundational knowledge for working with horses, donkeys, and mules. Students learn animal selection, basic anatomy, nutrition, daily care, safe handling, and facility design. Lab activities include aging horses by their teeth, evaluating hoof health, performing basic hoof care, and measuring vital signs. The course also covers current industry issues, the use of biotechnology, and key employability skills such as communication, safety, and record keeping.

## AGRICULTURE WELDING AND FABRICATION (01046/01047)

Grades: 11, 12      1 Credit      Full Year

Online + 3 regional competency-based skills lab days per semester

Students will participate in scheduled hands-on lab days at the **Southwest Career & Technical Education Center (SWCTE)**. These lab experiences allow students to practice welding techniques on industry-standard equipment, complete guided projects, and develop real-world shop skills under professional supervision.

This course introduces students to the fundamentals of the welding industry through classroom instruction and hands-on practice. Students learn workplace and equipment safety, PPE use, and shop procedures aligned with OSHA standards. Topics include welding theory, metal properties, blueprint reading, welding symbols, and weld inspection. Students gain experience with SMAW, GMAW, FCAW, GTAW, oxyfuel cutting, and plasma cutting. Emphasis is placed on technical accuracy and employability skills. Welding Technology I provides the foundational knowledge and skills needed for advanced welding courses and future training or employment.

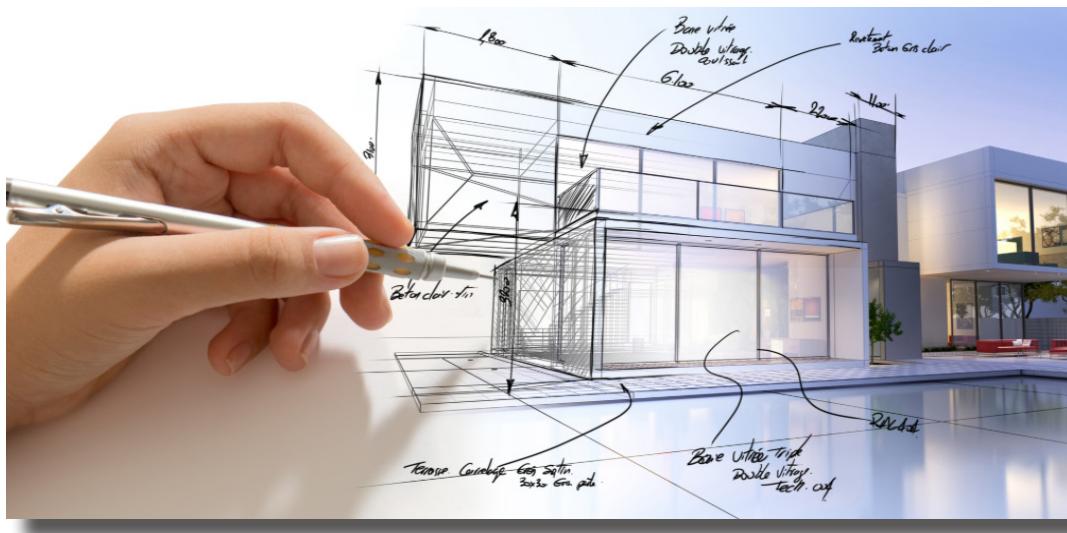
# ARCHITECTURE & ENGINEERING

ARCHITECTURE & ENGINEERING 1 (10514)

**Grades: 9-12**      **1 Credit**      **Full Year**

**Online + 1 regional competency-based skills lab day per semester**

Architecture & Engineering I is a fully online, asynchronous course that introduces students to how ideas become real-world designs. Students will learn to use industry-standard CAD (Computer Aided Drafting) software to create technical drawings used in architecture, engineering, and design fields. Through self-paced lessons and guided projects, students will develop foundational skills in both 2D and 3D design, learning essential CAD commands and design principles. This course is well-suited for students who enjoy problem solving, creativity, and technology, and who are motivated to manage their learning independently in an online environment. Students will need a laptop that can run the CAD program effectively.



# BUILDING TRADES

## OPERATING ENGINEERS PATHWAY



Through this unique partnership with the BASC 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.

**MUST BE TAKEN IN SEQUENTIAL ORDER**

### CONSTRUCTION EXPLORATIONS (37020)

**Grades: 10 - 12      0.5 Credit      Fall Semester**

**Online + a minimum of 1 regional competency-based skills lab day**

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 (37170)

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

**Online + a minimum of 1 regional competency-based skills lab day**

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)

**Grades: 11, 12      0.5 Credit      Fall Semester**

**Online + a minimum of 1 regional competency-based skills lab day**



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)

**Grades: 11, 12      0.5 Credit      Spring Semester**

**Online + a minimum of 1 regional competency-based skills lab day**

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.

# BUSINESS



## ACCOUNTING I (14010)

Grades: 9 - 12      0.5 Credit

Fall Semester

Online

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

## ACCOUNTING II (14011)

Grades: 9 - 12      0.5 Credit

Spring Semester

Online

**Prerequisite: Accounting I**

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

## ACCOUNTING III (14012)

Grades: 10 - 12      0.5 Credit

Fall Semester

Online

**Prerequisite: Accounting I and II**

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

## ACCOUNTING IV (14013)

Grades: 10 - 12      0.5 Credit

Spring Semester

Online

**Prerequisite: Accounting I - III are required**

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

## **BUSINESS FINANCE (14016)**

**Grades: 10 - 12**

**0.5 Credit**

**Fall Semester**

**Online**

Students will be introduced to business finances including running a business, keeping records, investing, credit, and making strategic decisions. Topics to be discussed include the accounting profession, financial reports, and compliance. Business organizations, law, personal finance, economics, marketing, and management. Students will use Everfi.com, NGPF.org, and other online resources. This class uses discussion and lessons designed by the instructor based on the standard and content. Google Classroom is used for our interactive notebook and organization of projects.

## **BUSINESS LAW (14090)**

**Grades: 10 - 12**

**0.5 Credit**

**Spring Semester**

**Online + 1 regional competency-based skills lab day**

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. We take a trip to Burleigh County Courthouse and discuss career opportunities in the field of law. This class uses discussion and lessons designed by the instructor based on the standard and content. Google Classroom is used for our interactive notebook and organization of projects.



# HEALTH SCIENCE

## INTRODUCTION TO HEALTH SCIENCE (37080)

Grades: 9 - 12

0.5 Credit

Fall or Spring Semester

### Online/ ITV + 1 regional competency-based skills lab day

The intro to health science is a semester-long, entry-level course designed for students interested in exploring careers in the healthcare field. The course introduces foundational concepts essential to health science pathways, including the history and trends of healthcare, a broad overview of healthcare careers, and the personal and professional qualities expected of healthcare workers such as communication, responsibility, teamwork, and professionalism. Students also develop practical skills, including the use of the 24-hour (military) clock, and are introduced to basic anatomy and physiology to build an understanding of the structure and function of the human body. Through interactive lessons, applied learning, and career-focused activities, students gain foundational knowledge and career awareness to support future coursework and pathways in health science.



## HEALTH SCIENCE I (07033)

Grades: 10 - 12

1 Credit

Full Year

### Online/ ITV + 1 regional competency-based skills lab day per semester

**Prerequisite: C or better in most recent science course.**

**Dual Credit is available through Bismarck State College**

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.

## MEDICAL TERMINOLOGY (07036)

Grades: 10 - 12

1 Credit

Full Year

### Online/ ITV

**Dual Credit is available through Dickinson State University and Bismarck State College**

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.

## EMERGENCY MEDICAL RESPONDER (07045)

Grades: 10 - 12      0.5 Credit      Fall or Spring Semester

Online/ ITV + 2-3 regional competency-based skills lab days

***Dual Credit is available through Bismarck State College***

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.**

## INTRODUCTION TO SPORTS MEDICINE (07034)

Grades: 11, 12      1 Credit      Full Year

Online/ ITV + 1 regional competency-based skills lab day per semester with 6 hours of job shadow

***Dual Credit is available through Dickinson State University and Bismarck State College***



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 an athletic trainer or other professionals in sports medicine during this course. American Heart Association BLS and First Aid Certification upon completion of the class.

## CERTIFIED NURSE AIDE (07032)

Grades: 10 - 12      1 Credit      Full Year

Online/ ITV + 4 regional competency-based skills lab days per semester with 24 hours of job shadow

***Prerequisite: Health Science I and recommendation***

***Dual credit is available through Dickinson State University and Bismarck State College***

This course provides instruction to those interested in becoming a Certified Nurse Aide. Students must obtain 16 hours of direct supervised instruction by an RN. 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. American Heart Association BLS Certification upon completion of the class. NDDOH State CNA certification test eligibility at the end of the class.

***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.***

## **HEALTH OCCUPATION EXPERIENCE PROGRAM (07999)**

**Grades: 11, 12**

**1 Credit, not to exceed 4 credits while in high school**

**Full Year**

**Online, In-Person, and On-the-Job Training**

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 a 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 not all students will be accepted. Content areas: Dental Assisting, Pharmacy Tech., Direct Support Staff (Able, Inc.), EMT, CNA, ATC, and any other health-related areas of interest may be accommodated for internships if placement is possible. (Example: PT, OT, Speech Therapy, Lab, Vet, EMS 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 such as passing the ICE, AMP, and RHS certification exams are met and job shadowing hours (300 hours total) are 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: (Different than the in-person CNA course offered).** The student is hired as an employee at a nursing home. Students will be expected to show up for scheduled shifts, meetings, and other job requirements, and complete assigned work tasks.

**Direct Support Staff:** 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.

**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.

## **FIREFIGHTER 1 (07100)**

**Grades: 11, 12**

**1 Credit**

**Full Year**

**Online + 1 regional competency-based skills lab day per semester**

This course provides high school students with an introduction to the essential skills and knowledge needed for a career in firefighting. Students will learn fire safety, fire suppression techniques, search and rescue operations, hazardous materials awareness, and basic emergency response protocols. This hybrid course combines online learning modules and hands-on skills training. Online coursework covers key concepts, while skills days are held approximately once per month to provide students with practical, in-person training. This course is designed to prepare students for further certification in fire services and is ideal for students interested in pursuing a career in emergency response or firefighting. Students must be at least 16 years old and able to attend five full-day hands-on training sessions each semester (10 total).

Enrollment for this course is limited to 10 RACTC students due to a collaborative partnership with the Dickinson Fire Department and Southwest CTE (SWCTE). Additional fees associated with this course may be required, up to \$750. Registration for college credit may be available: FIRE 101 / FIRE 101L through Dickinson State University.

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## **FAMILY CONSUMER SCIENCE**

### **CHILD DEVELOPMENT (09026)**

**Grades: 9 - 12**

**0.5 Credit**

**Fall Semester**

**Online + 1 regional competency-based skills lab day**



Child Development is a fully online, asynchronous course that explores how children grow and develop from prenatal stages through early childhood. Students will examine how children learn, identify age-appropriate activities, and study family development and preparation for parenthood. Additional topics include prenatal development, changing family relationships, current issues affecting children and families, and available community support systems. Through self-paced lessons, interactive activities, and applied projects, students will gain foundational knowledge useful for careers in education, healthcare, human services, and related fields. This course is ideal for students who are interested in working with children or supporting family well-being in an independent online learning environment.

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# INFORMATION TECHNOLOGY

## CYBERSECURITY (27280)

Grades: 10 - 12

1 Credit

Full Year

### Online

This course provides foundational knowledge in computer science, digital literacy, and cybersecurity. Students learn how networks, hardware, software, and emerging technologies, such as AI and the Internet of Things, operate and impact everyday life. The course builds computational thinking skills through problem-solving, algorithm design, data analysis, and collaborative projects. Students also examine the legal, ethical, and societal effects of technology while practicing responsible digital citizenship and managing their online identity. Key cybersecurity concepts include identifying threats, protecting personal information, evaluating software updates, and applying basic security controls. This class equips students with essential skills for advanced technology courses and safe, effective participation in a digital world.

## COMPUTER SCIENCE 1 (10810)

Grades: 9 - 12

0.5 Credit

Fall Semester

### Online

Computer Science I is a fully online, asynchronous course designed to introduce students to computational thinking, coding fundamentals, and digital problem solving. Students will work through self-paced modules exploring topics such as basic programming, app development, data visualization, cybersecurity concepts, and simulations. The course emphasizes logical thinking and real-world applications of computer science through interactive projects and problem-based learning. This course is ideal for students interested in technology and innovation who are comfortable working independently in an online learning environment.



# TRADE AND INDUSTRIAL

## ELECTRICAL TECHNOLOGY (17125)

**Grades: 11, 12**      **1 Credit with an opportunity to earn an additional 1 Credit through work-based learning**      **Full Year**

**Online + 2 regional competency-based skills lab days per semester**

This course provides foundational knowledge and skills for students pursuing a future career as an electrician. It combines online instruction with optional hands-on lab sessions, depending on location and scheduling. Students learn about construction trades, apprenticeships, safety practices, financial responsibility, and hazard prevention. The curriculum covers the electrical workplace, tools and materials, insulated conductors, anchors, fasteners, and basic electrical theory with a focus on direct current. Students also learn to navigate the National Electrical Code and interpret construction drawings, including 2D and 3D blueprints. This course is ideal for motivated, independent learners interested in electrical careers.

## WELDING TECHNOLOGY 1 (17236)

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

**Online + 3 regional competency-based skills lab days per semester**

Students will participate in scheduled hands-on lab days at the **Southwest Career & Technical Education Center (SWCTE)**.

These lab experiences allow students to practice welding techniques on industry-standard equipment, complete guided projects, and develop real-world shop skills under professional supervision.

This course introduces students to the fundamentals of the welding industry through classroom instruction and hands-on practice. Students learn workplace and equipment safety, PPE use, and shop procedures aligned with OSHA standards.



Topics include welding theory, metal properties, blueprint reading, welding symbols, and weld inspection. Students gain experience with SMAW, GMAW, FCAW, GTAW, oxyfuel cutting, and plasma cutting. Emphasis is placed on technical accuracy and employability skills. Welding Technology I provides the foundational knowledge and skills needed for advanced welding courses and future training or employment.

## Work-Based Learning (WBL)

### WORK-BASED LEARNING

**Grades: 11, 12**

**Instructor: Kathrein**

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.

# **GREAT WESTERN NETWORK (GWN)**

## **GWN ADMINISTRATION**

### **Bill Strasser**

GWN Director

Office: 701-226-2541

[bill.strasser@k12.nd.us](mailto:bill.strasser@k12.nd.us)

### **Brett Thompson**

GWN Assistant

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### **Amy Johnson**

### **WesternND CTC Powerschool Registrar and Marketing Coordinator**

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[amy.a.johnson@k12.nd.us](mailto:amy.a.johnson@k12.nd.us)

### **Laura Fiedler**

Business Manager

Turtle Lake-Mercer School

701-448-2365

[laura.fiedler@k12.nd.us](mailto:laura.fiedler@k12.nd.us)

## **GWN ITV CLASS OFFERINGS:**

Art I/II/III/IV

Anatomy

German I/II/III/IV

Pre-Algebra

General Math

Consumer Math

Algebra I

Algebra II

English Credit Recovery (Grades 9-12)

US History

World History

Law (Business/Criminal)

## **DUAL CREDIT ITV OFFERINGS:**

American Sign Language

English 110

English 120

Math 107 (Pre-Calc)

Math 103 (College Algebra)

COMM 110 (College Speech)

Soc 110

Psych 111

Calculus

US History

World History

# General Information

## **Scheduling Procedure for 2026-2027 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))

Once your school has registered its students on the registration website: <https://registration.cRACTC.org/login>, 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 2026-2027 School Year for ITV College classes (dual credit)**

Registration for ITV college dual credit classes that your students are interested in should be done directly to their college distance learning representative and not to the Western Dakota registrar, Amy Johnson. 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)

**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.

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

# 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.

## 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.

## PRE-ALGEBRA (11030)

**Grade: 9 - 12**      **1 Credit**      **Full Year**

Learners will develop their knowledge of the number system and computational fluency. Individuals will develop foundational knowledge of functions. Learners will use visualization and spatial reasoning to solve problems involving volume of geometric figures, to investigate the characteristics of figures, perform transformations, and construct logical arguments. Individuals will ask and answer questions by collecting, organizing and displaying relevant data, drawing inferences and conclusions, and making predictions.

## ALGEBRA I (11035)

**Grade: 9 - 12**      **1 Credit**      **Full Year**

Learners are continuing to build their foundational skills for Algebra I in this course. They continue to increase their computational fluency. Individuals advance their understanding of real number systems and learn to represent linear relationships. Learners will develop foundational knowledge of functions.

NOTE: This class is designed for a block class or a class supplemented with a math lab.

## ALGEBRA II (11036)

**Grade: 9 - 12**      **1 Credit**      **Full Year**

Learners will continue to develop a foundational understanding of the number system, operations and computational fluency. They will begin to represent, evaluate, and solve different types of mathematical sentences, including expressions, equations and inequalities representing linear and non-linear situations. Individuals will further their understanding of functions. They will organize, display, and analyze relevant data.

NOTE: This class is designed for a block class or a class supplemented with a math lab.

## **GENERAL MATH (11111)**

**Grade: 9 - 12**      **1 Credit**

**Full Year**

General Math reinforces and expands learners foundational math skills, such as arithmetic operations using rational numbers; area, surface area, and volume of geometric figures; angle relationships; creating equivalent expressions; solving simple equations and inequalities; and expands their knowledge of the real number system.

## **CONSUMER MATH (11145)**

**Grade: 10 - 12**      **1 Credit**

**Full Year**

Consumer Math reinforces mathematical understanding and applies these skills to develop personal and business financial literacy.

## **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.

## **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.

## **PROBLEMS OF DEMOCRACY (15201)**

**Grade: 9 - 12      1 Credit      Full Year**

Problems of Democracy combine a study of the structure of national, state, and local U.S. government with an overview of the principles of market economics.

## **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.

## **U.S. HISTORY (15085)**

**Grade: 9 - 12      1 Credit      Full Year**

U.S. History provides learners with an overview of the history of the United States, examining periods from Reconstruction through modern times.

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

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