

# **Roughrider Area Career & Technology Center**



**2018-19 Class Offerings**

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### **Health Sciences**

#### **Health Careers I (07033)**

**Grade Level: 10-12**

**Credit: 1 Credit**

**Duration of Class: Full Year**

**Format: ITV, Tegrity**

**Instructor: Schneider**

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

#### **Advanced Health Careers (07035)**

**Grade Level: 11-12**

**Credit: 1 Credit**

**Duration of Class: Full Year**

**Format: ITV, Tegrity**

**Instructor: Schneider**

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

**Medical Terminology (07036)****Grade Level: 10-12****Credit: 1 Credit****Duration of Class: Full Year****Format: ITV, Tegrity, On-Line****\*\*Will be offered for Dual Credit through Dickinson State University****Instructor: Schneider**

This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes, and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studied for each body system. The student will also learn medical terminology as it relates to pathology, diagnostics, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.

**Prevention/Care of Athletic Injuries (07034)****Grade Level: 10-12****Credit: 1 Credit****Duration of Class: Full Year****Format: ITV, Tegrity****Instructor: Schneider**

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

**Emergency Medical Services (07045)****Grade Level: 10-12****Credit: 1 Credit****Duration of Class: Full Year****Format: ITV****Instructor: Schneider**

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

## **Business Education**

### **Accounting I (14010)**

**Grade Level: 9-12**

**Credit: ½ Credit**

**Duration of Class: One Semester (1<sup>st</sup> Semester)**

**Format: ITV, Tegrity, Online**

**Instructor: Christensen**

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

### **Accounting II (14011)**

**Grade Level: 9-12 (Accounting I is a prerequisite)**

**Credit: ½ Credit**

**Duration of Class: One Semester (2<sup>nd</sup> Semester)**

**Format: ITV, Tegrity, Online**

**Instructor: Christensen**

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

### **Accounting III (14012)**

**Grade Level: 10-12 (Accounting I and Accounting II are a prerequisite)**

**Credit: ½ Credit**

**Duration of Class: One Semester**

**Format: ITV, Tegrity, Online**

**Instructor: Christensen**

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

**Accounting IV (14013)****Grade Level: 10-12 (Accounting, Accounting II and Accounting III is a prerequisite)****Credit: ½ Credit****Duration of Class: One Semester****Format: ITV, Tegrity, Online****Instructor: Christensen**

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

**Multi Media (14099)****Grade Level: 9-12****Credit: ½ Credit****Duration of Class: One Semester (2<sup>nd</sup> Semester)****Format: Online****Instructor: Christensen**

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

**Communication Technologies 14028****Credit: 1/2****Level: 9-12****Mrs. Shelly Christensen****Delivery Method: Online only****Glen Ullin High School**

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

**Business Law - 14090****Credits: 1/2****Grades: 9-12****Mrs. Shelly Christensen****Delivery Method: Online only****Glen Ullin High School**

**Description:** 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. Online only

## **Agriculture Education**

**Vet Science 01067**

**Grade Level: 10-12**

**Credit: 1/2 Credit**

**Duration of Class: One Semester**

**Format: ITV**

**Instructor: Zielke**

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

**Livestock Production 01061**

**Grade Level: 10-12**

**Credit: 1/2 Credit**

**Duration of Class: One Semester**

**Format: ITV**

**Instructor: Zielke**

This course is designed to prepare students for careers in the field of animal science and production in species including, but not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. The student will demonstrate technical skills relating to the interrelated human, botanical, scientific, and technological dimensions of animal systems and be able to assess the importance of the United States impact on world commodity markets while applying the principles of livestock breeding and nutrition in predicting the impact of current advances in genetics. The student is expected to describe common veterinary procedures and skills, practice

proper animal restraint techniques, demonstrate identification techniques, and demonstrate effective management strategies. The student will learn the anatomy and physiology related to nutrition, reproduction, health, and management of domesticated animals while understanding the nutritional requirements of ruminant and non-ruminant animals. The student is expected to discuss feeding practices and feed quality issues, explain animal genetics and reproduction, and research current and emerging technologies in animal reproduction. The student identifies animal pests and diseases and methods of disease control, treatment, and prevention. The student knows the factors impacting commodity prices and costs.

**Agriculture Sales and Service/Marketing 01034**

**Grade Level: 10-12**

**Credit: ½ Credit**

**Duration of Class: One Semester (1<sup>st</sup> Semester)**

**Format: ITV, Online**

**Instructor: Steeke**

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

**Botany Science – 13024 (Offered as Science Credit)**

**Agronomy Science – 01025**

**Grade Level: 10-12**

**Credit: ½ Credit**

**Duration of Class: One Semester (2<sup>nd</sup> Semester)**

**Format: ITV, Online**

**Instructor: Steeke**

This course is designed to prepare students for careers in the field of Botany and crop management. This course deals with, classifying living things, cellular biology, genetics and biotechnology, basic principles of soil science, soil erosion and land management, managing soil fertility, introduction to plant science, plant anatomy and physiology, plant propagation, examining plant growth, integrated pest management, producing grain crops, producing oil crops, grain transportation, storage and quality, producing forage crops, producing fiber and sugar crops, producing fruits and vegetables.

**Introduction to Agriculture - 01011**

**Grade Level: 9-12**

**Credit: ½ Credit or 1 Credit**

**Format: Tegrity/Online**

**Instructor: Steeke**

[www.mycaert.com](http://www.mycaert.com) will be the source used to provide information to the students through the use of Moodle. This would be an online class only with Videos and lectures posted by the teacher.

This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the Agriculture Education program. Individual units will familiarize the student with: basic mechanical theory and skills –principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals; soil and plant relationships that affect the production of food and fiber. Topics may include: soils, irrigation, land judging, plants, crop and weed identification, range management, horticulture, nursery, diseases, insects, and chemicals. This applied course introduces students to agricultural sciences with emphasis on technical skills, entrepreneurship, and occupational opportunities. Units may also include agricultural construction, food and fiber science, supervised agricultural experiences, and leadership development. Skills in identification of equipment, determining a bill of materials. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth science.



## **Information Technologies**

### **Geographic Information Systems (GIS) - 27400**

Credits: ½

Grades: 10-12

Instructor: Mrs. Paula Lengowski

Delivery Method: ITV/Online spring semester

Dual credit available

South Heart High School

**Description:** Students will have the opportunity to gather technical skills in the areas of geographic information systems, remote sensing, and global positioning systems. Students will learn the basic ESRI ArcView interface in the context of local and global problems. They will gain experience in the use of global positional system (GPS) units to gather authentic data and will be able to overlay their collected data on aerial photographs and satellite

### **Web Page Design - 27170**

Credits: 1/2

Grades: 9-12

Mrs. Paula Lengowski

Delivery Method: ITV or online (Tegrity)

South Heart High School

**Description:** The Web Design course is an introductory standards-based course on Web Design. The course includes learning experiences in basic HTML, modern web features including Cascading Style Sheets (CSS) and interactivity, web standards and accessibility, creation of web media, and planning, development, publishing, and evaluation of web sites. The course is based upon the ISTE's National Educational Technology Standards for Students (NET-S), 21<sup>st</sup> Century Skills, and the ACM Model Curriculum for K-12 Computer Science.