

Course Description Guide

2022- 2023

This course description guide provides information about courses offered at Valley City High School.

Use this guide to select courses that will meet graduation requirements and your own individual career goals.

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VALLEY CITY HIGH SCHOOL GRADUATION REQUIREMENTS

Note: VCHS requires 24 credits for a student to be eligible for graduation.

(Note: DC = Dual Credit)

<u>Courses:</u>	<u>Credits:</u>
English	4
- English 9	- (ENGL 232) Mythology DC
- English 10	- (ENGL 110) College Comp I DC
- English 11	- (ENGL 120) College Comp II DC
- English 12	
- (ENGL 125) Professional Writing w/ Literature DC	
- (COMM 110) Fundamentals of Public Speaking DC	
Mathematics	3
- Algebra	- Pre-Calculus
- Geometry	- Calculus
- Advanced Algebra	- (MATH 107) Pre-Calculus DC
- Consumer Math	- (MATH 165) Calculus DC
Science	3
- Physical Science	- STEM
- Biology	- Chemistry
- Physics	- (CHEM 115) Chemistry DC
- Advanced Biology	- (BIOL 151) General Biology DC
Social Studies	3
- World History	
- US History	
- (HIST 103) US History DC, (HIST 104) US History DC	
- Economics	
- American Government	
Physical Education <u>or</u> (HPER 100) Fitness & Wellness DC	1
Health	1/2
Family Living	1/2
Spreadsheets & Word Processing <u>or</u> (CIS 170) CSI DC	1/2
Financial Literacy	1/2
Electives	8

NOTES

- For admission to a 4-year public or private university in North Dakota, please check with the Admissions office of that university for course requirements or recommendations.
- For admission to a 1- or 2-year training program in North Dakota, check for recommended courses at the Admissions Office of that training program.
- For admission to a college in a different state, check for recommended courses at the Admissions Office of that college.
- For admission to NCAA Division I or Division II Athletics, check at www.eligibilitycenter.org for required courses.
- For admission to NAIA Athletics, check at www.naia.org for requirements.

VALLEY CITY HIGH SCHOOL COURSES 2022-2023

New Courses for 2022-23

Course Name (* = Required Course, \$\$\$ = fee for class) Grade Prerequisite Dual Credit (DC)

ART

Art I (\$\$\$).....	9-12		
Art II (\$\$\$)	10-12	Prerequisite	
Advanced Art III (\$\$\$).....	11-12	Prerequisite	
Advanced Art IV (\$\$\$).....	12	Prerequisite	
Community Art (\$\$\$).....	10-12		
Photography/Animation (\$\$\$)	9-12		

BUSINESS EDUCATION - 1 credit required

*Word Processing/Spreadsheets	9-12		
Introduction to Computer Information Systems DC (\$\$\$).....	10-12	Prerequisite	DC
*Financial Literacy.....	9-12		
Desktop Publishing	10-12		
Multimedia	10-12		
Multimedia II.....	11-12...	Prerequisite	
Accounting I	10-12		
Accounting II DC (\$\$\$)	10-12 ...	Prerequisite	DC
Accounting III/IV	11-12 ...	Prerequisite	
Marketing I	10-12		
Marketing II	11-12 ...	Prerequisite	

CAREER and TECHNICAL EDUCATION

Agronomy Science-CTE (\$\$\$)	9-12		
Horticulture (\$\$\$).....	9-12		
Livestock Production(\$\$\$)	11-12		
Natural Resource (\$\$\$)	9-12		
Veterinary Science (\$\$\$).....	11-12		
Introduction to Agriculture (\$\$\$).....	9-12		
Foundation of Agriculture (\$\$\$)	9-12		
Agriculture Business (\$\$\$)	11-12		
Agriculture Sales and Service (\$\$\$)	10-12		
Automotive Technology I (\$\$\$)	11-12		
Automotive Technology II (\$\$\$)	12	Prerequisite	
Computer Hardware & Operating Systems (\$\$\$)	11-12		
Cyber Security Operations (\$\$\$)	9-12		
Intro to Information Technologies (\$\$\$)	11-12		
Intro to Graphic Communication & Web Design (\$\$\$)	9-10		
Mobile Applications Development (\$\$\$)	9-12		
Programming Essentials Python (\$\$\$)	11-12		
Construction Careers I (\$\$\$)	11-12		
Construction Careers II (\$\$\$)	11-12	Prerequisite	
Architecture & Construction (\$\$\$)	9-12		
Graphic Communications I (\$\$\$)	11-12		
Graphic Communications II (\$\$\$)	12	Prerequisite	
Graphic Communications Career Cluster (\$\$\$)	11-12	Prerequisite	
Health Science I (\$\$\$)	10-12		
Health Science II (\$\$\$)	11-12	Prerequisite	
Medical Terminology (\$\$\$).....	10-12	Prerequisite.....	DC
Welding Technology I (\$\$\$)	11-12		
Welding Technology II (\$\$\$)	12	Prerequisite	

FAMILY and CONSUMER SCIENCE

Child Development	9-12
Nutrition & Foods I (\$\$\$).....	9-12
Family & Consumer Sciences	9-12

HEALTH - 1 credit required

*Health	9-12
*Family Living	10-12

LANGUAGE ARTS - 4 credits required

*English 9	9
*English 10	10

New Courses for 2022-23

Course Name (* = Required Course, \$\$\$ = fee for class) Grade Prerequisite Dual Credit (DC)

LANGUAGE ARTS (cont'd)

*English 11.....	11	Prerequisite	
*English 12.....	12	Prerequisite	
College Comp I DC (\$\$\$).....	11-12.....	Prerequisite	DC
College Comp II DC (\$\$\$)	11-12	Prerequisite	DC
Mythology DC (\$\$\$)	11-12	Prerequisite	DC
Creative Writing I	10-12		
Fundamentals of Public Speaking DC (\$\$\$)	11-12	Prerequisite	DC
Professional Writing w/Literature DC (\$\$\$)	11-12	Prerequisite	DC
Spanish I	9-12		
Spanish II	10-12 ...	Prerequisite	DC
Applied Communication.....	11-12	Prerequisite	

MATH - 3 credits required

*Algebra	9-10		
*Geometry	9-11	Prerequisite	
Advanced Algebra	10-12 ...	Prerequisite	
Consumer Math	11-12 ...	Prerequisite	
Pre-Calculus	11-12 ...	Prerequisite	DC
Calculus	12	Prerequisite	DC

MUSIC

Varsity Band	9-10		
Varsity Choir	9-10		
Senior Band	11-12 ...	Prerequisite	
Senior Choir	11-12		
Guitar.....	9-12		

PHYSICAL EDUCATION - 1 credit required

*Physical Education 1	9-12		
*Physical Education 2	10-12		
Fitness/Conditioning Activities	10-12		
Concepts of Fitness and Wellness DC (\$\$\$)	10-12	Prerequisite.....	DC
Adaptive PE	9-12		

SCIENCE - 3 credits required

*Physical Science	9		
*Biology	10	Prerequisite	
General Biology I (\$\$\$)	11-12 ...	Prerequisite	DC
Advanced Biology	11-12 ...	Prerequisite	
STEM Seminar I & II.....	11-12		
Chemistry	11-12 ...	Prerequisite	DC
Physics	11-12 ...	Prerequisite	

SOCIAL STUDIES - 3 credits required

North Dakota Studies	9-12		
*World History	10		
*US History	11		
US History DC (\$\$\$)	11-12 ..	Prerequisite.....	DC
Sociology.....	9-12		
Psychology DC (\$\$\$)	10-12....	Prerequisite.....	DC
*Economics	12	Prerequisite	
*American Government	12	Prerequisite	

TECHNOLOGY & ENGINEERING EDUCATION

Foundation of Technology	9-12		
Invention & Innovation	9-12		
ADA Robotics	9-12		
Banner & Canvas Design	9-12		
Banner & Canvas Design II.....	10-12	Prerequisite	

EDUCATION

Introduction to the Teaching Profession (\$\$\$)	11-12	Prerequisite.....	DC
Introductory Field Experience (\$\$\$)	11-12	Prerequisite.....	DC

New Courses for 2022-23

Course Name (* = Required Course, \$\$\$ = fee for class) Grade Prerequisite Dual Credit (DC)

DUAL CREDIT COURSES

VCHS Class Name	Offered at Grade Level	VCSU Class Name	Credit
Intro to Computer Information Systems DC....	10-12.....(Page 8)	CIS 170-Intro to Computer Information Systems	3
Accounting II DC.....	10-12.....(Page 8)	ACCT 200 – Elements of Accounting I	3
Concepts of Fitness and Wellness DC	10-12.....(Page 20)	HPER 100 – Concepts of Fitness and Wellness	2
Chemistry DC.....	11-12.....(Page 21)	CHEM 115 – Introductory Chemistry	4
General College Biology DC.....	11-12.....(Page 21)	BIOL 150 – General Biology I	4
US History 11 (S1) DC	11-12.....(Page 22)	HIST 103 – United States to 1877	3
US History 11 (S2) DC	11-12.....(Page 22)	HIST 104 – United States History to Present	3
College Comp I DC.....	11-12.....(Page 16)	ENGL 110 – College Composition I	3
College Comp II DC.....	11-12.....(Page 16)	ENGL 120 – College Composition II	3
Mythology DC.....	11-12.....(Page 16)	ENGL 232 – Mythology	3
Pre-Calculus A DC.....	11-12.....(Page 18)	MATH 107 – Pre-Calculus	3
Calculus I DC	12.....(Page 18)	MATH 165 – Analytic Geometry & Calculus I	4
Fundamentals of Public Speaking DC	11-12.....(Page 16)	COMM 110 – Fundamentals of Public Speaking	3
Professional Writing w/Literature DC	11-12.....(Page 16)	ENGL 125 – Introduction to Professional Writing	3
Psychology DC.....	10-12.....(Page 23)	PSYC 111-Introduction to Psychology	3
Introduction to the Teaching Profession DC...	11-12.....(Page 24)	EDUC 251- Introduction to the Teaching Profession	2
Introductory Field Experience DC.....	11-12.....(Page 24)	EDUC 252- Introductory Field Experience	2
Spanish II DC.....	10-12.....(Page 17)	SPAN 102- 1 st Year Spanish II	3
Medical Terminology DC.....	10-12.....(Page 13)	BIOL 171- Medical Terminology	3

Valley City State University - GPA of 3.0 or higher is needed.

To take a VCSU Dual Credit English or Math class as a Senior (if you took regular English 11 as a Junior), you must have qualifying ACT scores. For Dual Credit English courses, you must have an ACT English composite score of 18 or greater, and for Dual Credit Math, you must have an ACT math composite score of 21 or greater. The ACT test is given to Juniors in March, with no cost. If you do not meet the ACT composite requirements, you must then take an Accuplacer test.

To take a VCSU Dual Credit English or Math class as a Junior, you must have qualifying Accuplacer scores of—256 or greater on the Accuplacer Next Gen Writing Test (English), and/or 237 or greater on the Accuplacer Next Gen Advanced Algebra Functions Test or 255 or higher on the Accuplacer Next Gen Statistics Test (Math). The Accuplacer tests are given in the spring and must be completed by the end of the preceding academic year before Dual Credit classes will be taken.

NORTH DAKOTA ACADEMIC SCHOLARSHIP

And

NORTH DAKOTA CAREER AND TECHNICAL EDUCATION SCHOLARSHIP

Students may qualify for one scholarship, but not both. Both scholarships award students \$750 per semester, for a total annual award of \$1500. Awards are renewable each semester of college if a 2.75 GPA is maintained. Students may be eligible for up to \$6000 within six academic school years (do not have to be consecutive years).

The application deadline is in early June of each year, with students notified of their eligibility by June 30. Applications must be submitted online at <https://apps.nd.gov/DPI/scholarship/login.aspx>.

Common Requirements for Both Scholarships:

- Must meet the ND Diploma requirement of 22 credits, along with the VCHS 24 credit requirement.
- All grades must be "C" or better.
- GPA must be 3.00 or higher.
- Must complete one credit of Algebra II

Additional Course Requirements for the ND Academic Scholarship

- Dual Credit Course (1 credit required)
- Foreign Language or Coordinated Plan Career Tech Ed (2 credits required)
- Math Course that requires a pre-requisite of Algebra IIs
- Fine Arts, Foreign Language, or Career Tech Ed (1 credit required)
- ACT composite score must be 24 or higher.

Additional Course Requirements for the ND Career & Technical Education Scholarship

- Coordinated Career Tech Ed (2 credits required - Check with counselor for list of qualifying courses)
 - Other Career Tech Ed (2 credits required - Check with counselor for list of qualifying courses)
 - Fine Arts, Foreign Language, or any additional Career Tech Ed (1 credit required)
 - WorkKeys tests must be taken if ACT composite score is not 24 or higher. Must score a "5" on each of the three tests.
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ART

Credits Required: None

Art I S1 & S2

Credit: One-half Grade: 9,10,11,12 Prerequisite: To take S2, S1 is recommended, but not required.

This is an introductory course developed to allow students to explore the artistic process while developing skills with a variety of media (art materials such as clay, fiber, painting, printmaking, and more) and process in an art studio setting. This course focuses on teaching methods for independent and creative thinking and allows artists the autonomy to develop their artistic voice utilizing the Studio Habits of Mind (SHOM).

Art II S1 & S2

Credit: One-half Grade: 10,11,12 Prerequisite: Art I. To take S2, S1 is recommended, but not required.

This is a continuation course building on skills developed in Art 1. This class is designed to further allow students to explore the artistic process while developing skills with a variety of media (art materials such as clay, fiber, painting, printmaking & more) and process in an art studio setting. This course focuses on teaching methods for independent and creative thinking and allows artists the autonomy to develop their artistic voice utilizing the Studio Habits of Mind (SHOM).

Advanced Art III S1 & S2

Credit: One-half Grade: 11,12 Prerequisite: Art II. To take S2, S1 is recommended, but not required.

This is an advanced course building on skills developed in Art 2. This class is designed to further allow students to explore the artistic process while developing skills with a variety of media (art materials such as clay, fiber, painting, printmaking and more) and process in an art studio setting. This course focuses on teaching methods for independent and creative thinking and allows artists the autonomy to develop their artistic voice utilizing the Studio Habits of Mind (SHOM). This course will cover advanced work to create areas of study (sustained investigations). Field trips and speakers are also planned to enhance learning.

Advanced Art IV S1 & S2

Credit: One-half Grade: 12 Prerequisite: Advanced Art III. To take S2, S1 is recommended, but not required.

This is an advanced course building on skills developed in Art 3, emphasized on teaching methods for independent and creative thinking. This course allows artists the autonomy to develop their artistic voice utilizing the Studio Habits of Mind (SHOM). You will plan areas of study and learn valuable life skills to prepare creative endeavors after graduation. You will need to have the experience and maturity to select mediums, plan projects, be self-directed, work on your portfolio development, and continue an in-depth study of the art history timeline and other cultures. Field trips and speakers are also planned to enhance learning.

Community Art

Credit: One-half Grade: 10, 11, 12 Prerequisite: None

Do you have a love for carpentry, interior design, theater and/or art? This is the class for you! This is not your typical art class. In this course you will work as a commissioned artist meeting with clients, pitching ideas, collaborations, creating murals, sets, installations and MORE! This class is designed to assist in learning valuable life skills a working artist may experience. Learning activities are varied with classroom and field experiences.

Photography/Animation

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

Photography and animation have become an accessible creative medium for just about anyone prior to access to computer or phone. Through hands on projects, you will learn techniques created and mastered by animators and photographers over the course of history.

BUSINESS

Credits Required: One

NOTE: All of these business courses are CTE courses.

Word Processing / Spreadsheet – Required

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

Computers have become a basic part of our daily life. By understanding how to use them and the software that runs them, you will develop skills to help you succeed in school and in your career. These courses cover the current operating system, computer hardware & software, using the Internet, word processing using the current version of *Microsoft Word*, spreadsheets using the current version of *Microsoft Excel*, presentations using the current version of *Microsoft PowerPoint*, and *Integrated Applications*. You will be accountable to abide by the VCPS District's **Acceptable Use Policy**.

Introduction to Computer Information Systems (CIS 170) Dual credit option available through VCSU. See Page 24.

Credit: HS: One-Half/College:3 Grade: 10,11,12 Prerequisite: GPA of 3.0 or better

This course introduces word processing, spreadsheets, presentation software, and operating system software. Additional topics include history, ethics, uses of computers in society, and emerging applications for computers.

Financial Literacy – Required

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course is designed to assist student learning of valuable life skills in the areas of money and credit management, saving and investing, and career and retirement planning. Students will explore successful personal finance strategies and habits.

Desktop Publishing S1

Credit: One-half Grade: 10,11,12 Prerequisite: None

This course is an introduction to desktop publishing using *Adobe Photoshop* and *Adobe InDesign* graphics software. *Photoshop* uses electronic techniques to select, manipulate, and edit images, work with layers, combine raster and vector graphics, print in color, and manage color. *InDesign* is used for document layout and design. With it you will learn how to use text, graphics, and photographs to create professional quality finished documents for practical and business use.

Desktop Publishing S2

Credit: One-half Grade: 10,11,12 Prerequisite: Desktop Publishing S1

In this course you will get an introduction to desktop publishing using *Adobe Illustrator* graphics software. *Illustrator* is used for document layout and design. With it you will learn how to use text, graphics, and photographs to create professional quality finished documents for practical and business use.

Multimedia I

Credit: One-half each semester Grade: 10,11,12 Prerequisite: None

This class provides students with the opportunity to learn what goes into making good-quality productions for transmission over the airwaves. Students will be given opportunities to deliver content to countless people in the community. There are many roles within the class, which include planning stories, working in front of a video camera or through a microphone, working behind the scenes during recording, editing video, and critiquing stories. Projects include putting together stories for Hi-Liner News.

Multimedia II

Credit: One-half each semester Grade: 11,12 Prerequisite: Multimedia I

This class provides students with the opportunity to broadcast current events to the public. Students will have the opportunity to organize and broadcast the daily announcements along with in school current events. Live broadcasting will also let you expand to the schools and community events, such as graduations, presentations, lectures, new student orientations, and sporting events. Projects include reporting the daily news (announcements and other information), reporting live school and community-based events along with radio broadcasting.

Accounting I

Credit: One-half Grade: 10,11,12 Prerequisite: None

This course will acquaint you with the principles of accounting and finance. You will learn the theory of debits, how to analyze and build multi-column journal entries, post to ledgers, and read, interpret, and prepare financial reports. This class presents a complete accounting cycle for a service business organized as a proprietorship.

Accounting II (ACCT 200)Credit: HS: One-half/College: 3 Grade: 10,11,12 Dual credit option available through VCSU. See Page 24.
Prerequisite: Accounting I; for Dual Credit: 3.0 GPA required

This course presents a complete accounting cycle for a merchandising business organized as a corporation. It will be of great value to you in your personal life, especially if you are considering a career in accounting (CPA) or (MBA), office work, or managing your own small business. This course fulfills VCSU's requirements for ACCT 200 and carries the option of earning dual credit.

Accounting III

Credit: One-half Grade: 11,12 Prerequisite: Accounting II

In this course you will gain a detailed knowledge of accounting. You will learn more difficult transactions of income and spending and how to prepare financial statements and reports. Automated Accounting is used.

Accounting IV

Credit: One-half

Grade: 11,12

Prerequisite: Accounting III

This course covers an in-depth knowledge of accounting. You will learn more difficult transactions of income and spending and how to prepare financial statements and reports. Automated Accounting is used.

Marketing I S1

Credit: One-half

Grade: 10,11,12

Prerequisite: None

In this course you will explore the aspects of marketing: promotion, selling, merchandising, customer service, and business fundamentals. You will also learn skills and concepts related to the 4 P's of marketing. Student leadership development skills are integrated into this class. You can join the DECA organization and have the opportunity to compete at local, state, and international competitions.

Marketing I S2

Credit: One-half

Grade: 10,11,12

Prerequisite: Marketing I S1

This course will continue to explore the many aspects of marketing. You will also work on independent marketing projects such as writing a complete business plan for a small business, launching an advertising campaign, or managing a project related to a national DECA competitive event. You can join the DECA organization and have the opportunity to compete at local, state, and international competitions.

Marketing II S1

Credit: One-half

Grade: 11,12

Prerequisite: Marketing I S2

In this course you will advance your knowledge of marketing and managing a business. You will use your creativity to advertise and promote activities both in the classroom and in the school store. You can join the DECA organization and have the opportunity to compete at local, state, and international competitions.

Marketing II S2

Credit: One-half

Grade: 11,12

Prerequisite: Marketing II S1

In this course you will advance your knowledge of marketing and managing a business. You will use your creativity to advertise and promote activities both in the classroom and in the school store. You can join the DECA organization and have the opportunity to compete at local, state, and international competitions.

CAREER and TECHNICAL EDUCATION*Classes are held at the Sheyenne Valley Area Career Technology Center**Credits Required: None*

Agronomy Science S1 & S2

Credit: One half

Grade: 9,10,11,12

Prerequisite: None

This course provides the study of plant physiology and morphology and its relationship to growth, development, and reproduction of crop and forage plants in the global environment. Topics include seed identification, testing and grain grading, identification of agronomic crops and major weeds in crop production. Harvesting and handling will be emphasized. Leadership development and supervised agricultural experience programs are an integral part of this course. Students will show they can successfully manage a fictitious farm.

Horticulture S1

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course prepares students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures. Topics to be covered include soils, plants, plant identification, and plant entomology. Landscape design units will prepare students to design, construct and maintain planted areas and devices for the beautification of home grounds and other areas of human habitation and recreation. Students will help prep, plant, maintain and harvest crops in the greenhouse.

Livestock Production/Equine Production S2

Credit: One-half Grade: 11,12 Prerequisite: None

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, horses, and poultry. The students will learn nutrition, reproduction, skeleton, animal health and marketing.

Natural Resources S1

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course provides an opportunity for students to increase awareness of the close ties among living organisms. Natural and environmental concerns with the interrelationships of living organisms and the world around us. Leadership development and supervised agricultural experience programs are also an integral part of this course.

Veterinary Science S2

Credit: One-half Grade: 11,12 Prerequisite: None

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 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. The student will evaluate animal diseases and identify internal and external parasites. Students will complete sutures, injections, bandages, diagnose illnesses, and practice oral communication between client and veterinarian.

Introduction to Agriculture S1

Credit: One Grade: 9,10,11,12 Prerequisite: None

This applied course is designed to introduce students to agriculture, its applications, and leadership development as the core foundation of the agriculture education program. The students will learn about animal systems, plant systems, crop systems, production of food and fiber, food science, agriculture processing, and natural resources.

Foundation of Agriculture S2

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This applied course is designed to enhance student's perception of agriculture, its applications, and leadership development as the core foundation of the Agriculture Education program. Individual units will familiarize the students with principles of evaluation and selection of beef, swine, sheep, horse, and dairy animals, along with soil and plant relationships that affect the production of food and fiber. Topics may include soils, irrigation, land judging, plants, crop and weed identification.

Agriculture Business S2

Credit: One Grade: 11,12 Prerequisite: None

This course is designed to introduce the students to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, recordkeeping, finance, risk management, business law, marketing, and careers in agribusiness. Leadership development and supervised agricultural experience programs are an integral part of this course. Group project of starting an agriculture business will include meeting with loan officers, insurance agents, and industry leaders. Final project will be an oral group presentation about your business to a loan officer.

Agriculture Sales and Service S1

Credit: One-half Grade: 10,11,12 Prerequisite: None

This course will provide students 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, interviewing, human relations, marketing, selling, displaying, using business machines, business accounting, and management skills. Leadership development and supervised agricultural experience programs are an integral part of this course. Students will be required to complete an individual oral sale of an agriculture product, complete an oral group presentation, and visit with an industry sales representative.

Automotive Technology I S1

Credit: One Grade: 11,12 Prerequisite: None

Upon successful completion of this course, you will be able to demonstrate skills in auto shop and personal safety, automotive steering and suspension, and automotive brake systems, in accordance with NATEF GST Program 2009 Standards.

Automotive Technology I S2

Credit: One Grade: 11,12 Prerequisite: Automotive Technology I S1

Upon successful completion of this course, you will be able to demonstrate skills in automotive engine performance and automotive engine repair, in accordance with NATEF GST Program 2009 Standards.

Automotive Technology II S1

Credit: One Grade 12 Prerequisite: Automotive Technology I S2

Upon successful completion of this course, you will be able to demonstrate skills in auto shop and personal safety, automotive electrical and electronics, and automotive heating and air-conditioning, in accordance with NATEF GST Program 2009 Standards.

Automotive Technology II S2

Credit: One Grade 12 Prerequisite: Automotive Technology II S1

Upon successful completion of this course, you will be able to demonstrate skills in automatic transmissions and transaxles, and manual transmissions and transaxles, in accordance with NATEF GST Program 2009 Standards.

Computer Hardware & Operating Systems S1

Credit: One-half Grade: 11,12 Prerequisite: None

This course is for you if you want to pursue a career in IT technology or if you want to have a working knowledge of how a computer works, how to assemble a computer, and how to troubleshoot hardware and software issues. You will work with the online curriculum and student learning system located at <http://www.netacad.com>, Module One through Module Five. They will cover the fundamentals of computer hardware and software as well as advanced concepts. You will be able to describe the internal components of a computer, to successfully assemble a computer system, to install an operating system, and to troubleshoot using system tools and diagnostic software. You will also be able to connect to the Internet and to share resources in a network environment. Information will be covered on laptops and portable devices, wireless connectivity, security, safety and environmental issues, and communication skills.

Computer Hardware & Operating Systems S2

Credit: One-half Grade: 11,12 Prerequisite: Computer Hardware & Operating Systems S1

In this semester course you will continue to work with the online curriculum and student learning system located at <http://www.netacad.com>, Module Six through Module Twelve. You will gain confidence with the components of desktops and laptop computers, and will learn the proper procedures for installing, upgrading, and troubleshooting.

Cyber Security Operations S2

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course provides an introduction to the knowledge and skills needed for a security analyst working with a security operations center team. It teaches core security skills needed for monitoring, detecting, investigating, analyzing, and responding to security events, thus protecting systems and organizations from cyber security risks, threats, and vulnerabilities. *****Note: This course is only offered during 2nd semester.** ***

Introduction to Information Technologies S1

Credit: One-half Grade: 11,12 Prerequisite: None

An exploratory level course that provides an exposure to careers and issues in information technology. Students will develop skills including teamwork, communication, entrepreneurship, and personal management. Students will also gain hands-on experience in three major IT areas including: • Hardware and Software: Safety and tools, numbering systems and basic electricity, operating systems, troubleshooting, etc. • Networking: LAN fundamentals, peer-to-peer networking, IP addressing, troubleshooting, etc. • Programming/Interactive-media: Visual Basic and HTML basics

Introduction to Information Technologies S2

Credit: One-half Grade: 11,12 Prerequisite: Intro to IT Semester 1

In this semester, you will continue to develop skills including teamwork, communication, entrepreneurship, and personal management. Students will also gain hands-on experience in three major IT areas including: • Hardware and Software: Safety and tools, numbering systems and basic electricity, operating systems, troubleshooting, etc. • Networking: LAN fundamentals, peer-to-peer networking, IP addressing, troubleshooting, etc. • Programming/Interactive-media: Visual Basic and HTML basics

Introduction to Graphic Communication & Web Design S1

Credit: One-half Grade: 9,10 Prerequisite: None

This is an introductory course in the planning, principles, fundamentals and development of web site design. You will learn the history and future of the Web, HTML basics, designing for communication, working with images. There is also focus on basic HTML, Web standards and accessibility, communication skills and strategies, creation of Web media, planning, development, publishing and evaluation of Web sites.

Introduction to Graphic Communication & Web Design S2

Credit: One-half Grade: 9,10 Prerequisite: Introduction to Web Design S1

In this course you will learn to design, develop and maintain content within Expressions Web Design, add typical interface components, and use Expression Studio and Photoshop to create optimal images for the Web. You will learn to organize and manage prototypes, Web pages, and layers, along with the production process, and Web publishing and maintenance.

Mobile Applications Development S1

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course will introduce students to mobile application development and management using a variety of commercial and open-source software. Topics to be included in the course are: 1) installation and modification of application; 2) code modification; 3) design and implementation; 4) database systems management; 5) security; and 6) customer service. *****Note: This course is only offered during 1st semester.*****

Programming Essentials Python

Credit: One Grade: 11,12 Prerequisite: None

This course teaches Python, a general-purpose programming language used to build almost anything. Python is key for back end web development, data analysis, artificial intelligence, and scientific computing, all of which are key for pursuing IT careers. With this course, you learn to design, write, debug, and run programs encoded in the Python language. No prior programming knowledge is required. The course begins with the very basics, guiding you step by step until you become adept at solving more complex problems.

Construction Careers I S1

Credit: One Grade: 11,12 Prerequisite: None

In this entry-level course you will initially complete the OSHA ten-hour class online. During your two-years in this program you will be involved in all facets of building a house.

Construction Careers I S2

Credit: One Grade: 11,12 Prerequisite: Construction Careers I S1

This course will be continued exposure and instruction in techniques used during building construction methods.

Construction Careers II S1

Credit: One Grade: 11,12 Prerequisite: Construction Careers I S2

During this second year of the two-year program, you will further your knowledge of methods and techniques in building construction and will learn skills in becoming a finish carpenter.

Construction Careers II S2

Credit: One Grade: 11,12 Prerequisite: Construction Careers II S1

Upon completion of this two-year course, you will have learned about electrical wiring, plumbing, framing, siding, insulating, venting, drywall, roofing, and soffit and trim for residential construction.

Architecture and Construction S1 & S2

Credit: One-half Grade: 9,10 Prerequisite: None

This class is designed to give students an introduction to the fields of architecture, architectural design, as well as construction fields and methods. Students will learn about and be exposed to a variety of field related occupations. During the second semester, students will design and construct a project, typically of their own choosing and with instructor approval. An emphasis is on cabinet style and design. The class will learn woodworking methods, joinery techniques, then finishing techniques.

Architecture and Construction S1 & S2

Credit: One-half Grade: 11,12 Prerequisite: None

This class is designed to give students an introduction to the fields of architecture, architectural design, as well as construction fields and methods. Students will learn about and be exposed to a variety of field related occupations. During the second semester, students

will design and construct a project, typically of their own choosing and with instructor approval. An emphasis is on cabinet style and design. The class will learn woodworking methods, joinery techniques, then finishing techniques.

Graphic Communications I S1

Credit: One Grade: 11,12 Prerequisite: None

This course is an introduction to design, with emphasis on fundamentals, typography, and layout. You will create both traditional and computer-generated projects and learn the basics of black and white photography and darkroom safety. Using the Photoshop program, you will learn about workspace, documents, color, selections, layers, text, painting and erasing, and photo retouch.

Graphic Communications I S2

Credit: One Grade: 11,12 Prerequisite: Graphic Communications I S1

In this course you will learn more about design, and work with formal elements, principles, manipulation of graphic space, components, typography, and layout/grids. With the CorelDRAW program, you will gain experience with documents, the toolbox, objects, fills, outlines and text.

Graphic Communications II S1

Credit: One Grade: 12 Prerequisite: Graphic Communications I S2

This course is a continuation of Commercial Art I with additional emphasis on advertising, digital photography, and tabletop studio lighting. You will use Photoshop to learn pen tool techniques, vector shapes/clipping paths, and advanced layer techniques, and special effects.

Graphic Communications II S2

Credit: One Grade: 12 Prerequisite: Graphic Communications II S1

In this course you learn about logos, symbols, stationary design, posters, book jackets/CD covers, packaging, visual identity, advertisements and portfolios. You will also use the Illustrator and InDesign programs to study advanced areas of design. A digital camera is encouraged but not necessary.

Graphic Communications Career Cluster S2

Credit: One Grade: 11,12 Prerequisite: Graphic Communications I or Intro to Graphic Comm/Web Design

The Career Cluster for Arts, Audio-Video Technology and Communications encompasses designing, producing, exhibiting, performing, writing and publishing multimedia content including visual and performing arts and design, journalism and entertainment services. Career opportunities are available in the pathways of Audio and Video Technologies, Printing Technologies, Visual Arts, Performing Arts, Journalism and Broadcasting and Telecommunications Technologies.

Health Science I S1

Credit: One Grade: 10,11,12 Prerequisite: None

In this course you will learn basic health care skills, applied academics, professional development, leadership, and organizational skills. Core skills involved are becoming aware of different Healthcare professions and facilities, medical terminology and abbreviations, basic anatomy, professional standards, safety, nursing skills, and basic CPR/First Aid training through American Heart Association. Job shadow opportunities available.

Health Science I S2

Credit: One Grade: 10,11,12 Prerequisite: Health Science I S1

In this course you will continue to advance your health skills and build on the knowledge that's learned in Health Science I.

Health Science II S1

Credit: One Grade: 11,12 Prerequisite: Health Science I S2

In this course you will advance further into some anatomy/physiology knowledge while learning about diseases and treatments, and medical terminology/abbreviations. In addition, will learn other aspects such as child development, nutrition, and mental illness. Core skills involved are nursing assistant skills, nursing skills, and CPR/First Aid training through American Heart Association. Job shadow opportunities will be available.

Health Science II S2

Credit: One Grade: 11,12 Prerequisite: Health Science II S1

In this course you will continue to advance your health skills and build on the knowledge that's learned in Health Science II.

Medical Terminology S1 or S2 (BIOL 171)

Credit: One-half Grade: 10,11,12 Prerequisite: GPA of 3.0 or better

Dual credit course offered through VCSU. See Page 24.

In this course you will learn medical language used in all medical fields. This includes learning prefixes, suffixes, and root words, their meanings, spelling, and pronunciations. Anatomy and Physiology of major organs, pathological conditions, lab studies, clinical procedures and abbreviations are studied for eight body systems.

Welding Technology I S1

Credit: One Grade: 11,12 Prerequisite: None

In this class you will gain the knowledge and skills needed for entry-level jobs in welding. You will learn about shop safety, oxyacetylene fuel cutting and welding, and shielded metal arc welding.

Welding Technology I S2

Credit: One Grade: 11,12 Prerequisite: Welding Technology I S1

During this semester you will learn more about shielded metal arc welding and gas metal arc welding (both solid wire and flux core wire). You will get an introduction to gas tungsten arc welding, blueprint reading for welders, and basic metallurgy. You will also be exposed to testing procedures used in becoming a certified welder. After you gain basic welding skills, you are encouraged to work on projects to help you sharpen your fabrication and welding skills.

Welding Technology II S1

Credit: One Grade: 12 Prerequisite: Welding Technology I S2

In this course you will build on and refine skills learned in Welding Technology I, with more emphasis on gas metal arc welding and gas tungsten arc welding. In addition, you will assist Welding Technology I students and will be assigned supervisory duties relative to the operation of a welding shop.

Welding Technology II S2

Credit: One Grade: 12 Prerequisite: Welding Technology II S1

During this semester you will advance your welding skills with the addition of more responsibility as foreman and on fabrication projects. You will continue to test your practice welds, with the purpose of preparing for certification testing on your own after graduation. If you complete this two-year program and complete the assigned tasks, you should have the proficiency to secure a welding job after graduation.

Cooperative Work Experience

Credit: Up to 2 Grade: 12 Prerequisite: Available to second semester seniors or any student who has two years of experience in a program track.

This course provides students with a regularly scheduled, supervised community-based employment opportunity related to specific community occupations in order to develop and improve work skills. The employment must be preceded or concurrent with classroom instruction related to the work experience, consistent with the student's occupational goals and pre-approved by administration one semester in advance of placement. Specific training plans shall be developed with the employer for each student placed. The training plan shall include provisions for assessment of student progress and shall include onsite visits by the supervisor or designee during the student's placement. (***Note: Student must be 16+, have a valid driver's license, receive permission of teacher and parent/guardian. An agreement must be made with the employer in advance. Cooperative Work Experience cannot be completed with a relative or family member.**)

FAMILY and CONSUMER SCIENCE

Credits Required: None

NOTE: All of these FACS courses are CTE courses.

Child Development

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course is designed to increase students' knowledge of how children grow and develop, and to foster acquisition of skills that promote healthy development of the individual. Ages covered will include conception to pre-teen. Students will learn about processes in individual development; how children learn; age-appropriate activities for children; family development and preparation for parenthood; prenatal development; related careers; and leadership development. Students will have the opportunity to gain hands-on experience with childcare and elementary students.

Nutrition & Foods I (Can be ½ semester or full year)

Credit: One Grade: 9,10,11,12 Prerequisite: None

This course will prepare students to make critical decisions about food that will contribute to their health and well-being of themselves, their families, and their communities. The course will include basic food selection and storage, accurate and appropriate measuring, basic cooking terms and techniques, and working safely in the kitchen. Students will learn how to read food labels and how to apply them to their eating habits and their dietary needs. Lab experiences will focus on preparing and tasting a variety of foods. This is a year-long or semester class offered every year.

Family & Consumer Sciences I

Credit: One-half Grade: 9, 10, 11, 12 Prerequisite: None

This course is an extension of concepts learned in junior high FACS classes. Topics covered will include sewing, nutrition and food preparation, leadership and teamwork, and life skills related to living on your own and career readiness.

HEALTH

Credits Required: One

Health - Required

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

You will also learn about responsible decision-making by creating a personal plan to include the following content areas:

- Abstinence, Puberty & Personal Health
- Emotional & Mental Health
- HIV, STD & Pregnancy Prevention
- Nutrition & Physical Activity
- Tobacco, Alcohol & Other Drug Prevention
- Violence & Injury Prevention

Family Living - Required

Credit: One-half Grade: 10,11,12 Prerequisite: None

Family Living is a one semester comprehensive course designed to help students interpret the nature, function, and significance of the family. Students will also incorporate Sociology, Psychology, Health, and Consumer Economics to help explore all aspects of life. Students will become acquainted with the factors affecting personality, identify the functions of relationships in family, friends, marriage, and learn decision making skills. It also covers health, lifestyle options, communication techniques, career information, identify parenting responsibilities, family crises and coping strategies. This class gives practical information to help deal with "real-life" situations and how consequences affect how you are and how your choices could affect your future.

LANGUAGE ARTS

Credits Required: Four

Note: To enroll in the next grade level of required English courses, you must have passed at least one semester at the previous grade level. A failed semester must be made up before advancing to the next grade level, or it must be taken concurrently with the next grade level class.

English 9 S1 – Required

Credit: One-half Grade: 9 Prerequisite: None

You will learn about the basic types of literature, skills in speaking, writing, and listening. A Shakespeare unit is a major part of this semester, and independent reading is a component of this course.

English 9 S2 – Required

Credit: One-half Grade: 9 Prerequisite: English 9 S1

In this course you will continue to learn about the basic types of literature, skills in speaking, writing, and listening. A major research project is a requirement to pass this semester, and independent reading is also a component of this course.

English 10 S1 – Required

Credit: One-half Grade: 10 Prerequisite: English 9 S2

You will learn speaking, reading, writing, and listening skills. This semester includes an intense study of grammar and a major unit on research skills, resulting in a significant research report. This research project is a requirement to pass English 10 A. Independent reading is an ongoing component of this course.

English 10 S2 - Required

Credit: One-half Grade: 10 Prerequisite: English 10 S1

In this course you will learn additional speaking, reading, writing, and listening skills. This semester focuses on major units in literature and includes a significant memorization assignment. Independent reading is an ongoing component of this course.

English 11 S1 – Required

Credit: One-half Grade: 11 Prerequisite: English 10 S2

You will continue to practice speaking, listening, writing and reading skills, with an emphasis on public speaking and a chronological study of American Literature. Notable selections include American literature through the 1850s. Included is a major research project. The research project is a requirement to pass English 11 A. Independent reading is an ongoing component of this course.

English 11 S2 – Required

Credit: One-half Grade: 11 Prerequisite: English 11 S1

In this course you will continue to practice speaking, listening, writing, and reading skills with an emphasis on effective communication and a chronological study of American literature. Notable selections include *The Adventures of Huckleberry Finn*, *Finding Laura Buggs*, and post-1850s literature. Independent reading is an ongoing component of this course.

English 12 S1 - Required

Credit: One-half Grade: 12 Prerequisite: English 11 S2, or English Language 11 College Comp

You will gain experiences in oral and written composition, listening and speaking skills, focusing on English and/or World Literature. Independent Reading is a component of this course.

English 12 S2 - Required

Credit: One-half Grade: 12 Prerequisite: English 12 S1

You will continue the study of oral and written communication and listening and speaking skills, focusing on English and/or World Literature. Independent Reading is a component of this course. A major term paper is a requirement to pass this course.

College Comp I DC (ENGL 110)

Credit: HS: One-half/ College: 3 Grade 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: English 10 B with grade of "B" or better, 3.0 GPA, and Accuplacer Next Gen Writing test score of 256 or greater.

This course aligns with VCSU's requirements for ENGL 110 and carries the option of earning college credit. You will be introduced to college-level reading, writing, rhetoric, and critical thinking skills. You will draw on your own experiences and observations as you write in a variety of expository organizational patterns. *****Note: this course can only be taken for Dual Credit. Student must pass Accuplacer test by the end of May 2022 to be accepted into this Dual Credit course for the 2022-23 school year.*****

College Comp II DC (ENGL 120)

Credit: HS: One-half/ College: 3 Grade: 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: College Comp I DC, **OR** a score of 23 or greater on the ACT test

This course aligns with VCSU's requirements for ENGL 120 and carries the option of earning college credit. You will continue to build on the writing and analysis skills learned in College Comp I, with emphasis on research writing and documentation. *****Note: this course can only be taken for Dual Credit.*****

Mythology DC (ENGL 232)

Credit: HS: One-half/College: 3 Grade: 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: English 10 B with grade of "B" or better, 3.0 GPA, and Accuplacer Next Gen Writing test score of 256 or greater.

This course will examine and study myths, legends, and folktales from a variety of ethnicities, countries, time periods, and cultures. Many of our human stories are present across cultures and time periods. The knowledge and awareness of these mythological references will inform all learners as they interpret the world around them. *****Note: this course can only be taken for Dual Credit.*****

Creative Writing I S1

Credit: One-half Grade: 10,11,12 Prerequisite: None

In this course you will write creatively. You will write poetry, short stories, narratives, one-act plays, research to collect information, meet deadlines, and master journalistic/creative writing skills. In addition, students will also advance speaking/listening skills and share writing with others.

Fundamentals of Public Speaking DC (COMM 110) Dual credit offered through VCSU. See Page 24.

Credit: HS: One-half/College: 3 Grade 11,12 Prerequisite: 3.0 GPA

This course aligns with VCSU's requirements for COMM 110 Fundamentals of Public Speaking and carries the option of earning college credit. In this basic speech course, you will prepare and deliver speeches for a variety of occasions and audiences. Emphasis is placed on extemporaneous speaking, effective listening, and critical evaluation. *****Note: this course can only be taken for Dual Credit.*****

Professional Writing w/Literature DC (ENGL 125) Dual credit offered through VCSU. See Page 24.

Credit: HS: One-half/College: 3 Grade: 11,12 College Comp I DC, **OR** a score of 23 or greater on the ACT test

This course aligns with VCSU's requirements for ENGL 125 and carries the option of earning college credit. You will practice the writing skills needed in business and technology fields, including technical organizational patterns, document design, readability of text, research methods, and research reporting. *****Note: this course can only be taken for Dual Credit. ENGL 125 may be counted as a**

second composition course or as an upper-level writing course at ND public institutions. It may count as an elective credit at out-of-state institutions. Check with your desired institution to see how the credits will transfer. ***

Spanish I S1

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course is designed for you who are beginning the study of Spanish. You will learn the four skills of communication - listening, speaking, reading and writing. Skills will be developed through conversation, reading, and writing activities. In addition, various aspects of the Hispanic culture will be introduced.

Spanish I S2

Credit: One-half Grade: 9,10,11,12 Prerequisite: Spanish 1 S1

In this course you will continue the study of Spanish I. You will practice more of the four skills of communication – listening, speaking, reading and writing. Additional skills will be developed through conversation, reading, and writing activities. Further aspects of the Hispanic culture will be explored.

Spanish II S1

Credit: HS: One-half Grade: 10,11,12 Prerequisite: Spanish I S2

This course reinforces the fundamental skills you acquired in Spanish I. The study of Hispanic culture will be continued.

Spanish II S2 (SPAN 102)

Credit: HS: One-half/College: 3 Grade: 10,11,12 Prerequisite: Spanish II S1 & GPA of 3.0 or better

Dual credit offered through VCSU. See Page 24.

In this course you will develop more advanced listening, speaking, reading, writing, and translating skills. The study of Hispanic culture will be continued.

Applied Communication I S1

Credit: One-half Grade: 11,12 Prerequisite: Teacher recommendation and administrative approval

This course is designed to emphasize the practical applications of English/Language Arts in the workplace and adult life. Skills that are the focus include workplace writing, effective communications skills on various media, and job-related activities involving reading, writing, listening, and speaking. Personal writing in the adult world, being a good citizen through jury service, researching sources in media and contributing to the community in a helpful way are also included in the curriculum modules. **(NOTE: This course meets VCHS graduation requirements but is not recommended as a course of study for students planning to attend a four-year university.)**

Applied Communication S2

Credit: One Half Grade: 11,12 Prerequisite: Semester 1, Teacher recommendation, and administrative approval

This second semester course continues to focus on the practical application of English/Language Arts in the workplace and adult life. Skills that are in focus include workplace simulation scenarios, written responses and communication in a variety of settings, vocabulary enhancement and word choice review, and other job and adult related skills involving reading, writing, listening and speaking. Some reading strategies, searching for authentic information and logical thinking strategies are also included in the curriculum modules. **(NOTE: This course meets VCHS graduation requirements but is not recommended as a course of study for students planning to attend a four-year university.)**

MATH

Credits Required: Three

NOTE: One credit of Math above Advanced Algebra must be taken in order for a student to be eligible for the North Dakota Academic Scholarship.

Algebra S1 - Required

Credit: One-half Grade: 9,10 Prerequisite: Math 8

In this course you will explore and study one- and two-variable statistics, linear equations, inequalities, and systems.

Algebra S2 - Required

Credit: One-half Grade: 9,10 Prerequisite: Algebra S1

During this semester, you will explore and study functions, exponential relationships, and quadratic relationships.

Geometry S1 – Required

Credit: One-half Grade: 9,10,11 Prerequisite: Algebra S2

Topics covered in this semester are foundations of geometry, geometric reasoning, parallel and perpendicular lines, triangles, polygons and quadrilaterals. This course is recommended if you plan to attend a 4-year post-secondary school.

Geometry S2 – Required

Credit: One-half Grade: 9,10,11 Prerequisite: Geometry S1

In this semester you will learn about similarity, right triangles and trigonometry, transformational geometry, perimeter, circumference, area, spatial reasoning, circles, and probability. This course is recommended if you plan to attend a 4-year post-secondary school.

Advanced Algebra S1

Credit: One-half Grade: 10,11,12 Prerequisite: Geometry

In this course you will explore the foundations of functions, as well as quadratic, polynomial, exponential, logarithmic, and rational functions.

Advanced Algebra S2

Credit: One-half Grade: 10,11,12 Prerequisite: Advanced Algebra S1

You will study a continuation of topics covered in Advanced Algebra A that include radical functions, attributes of functions, probability, data analysis, statistics, sequences, series, and trigonometric functions and their graphs.

Consumer Math S1

Credit: One-half Grade: 11,12 Prerequisite: Algebra, and recommendation from Math Instructor

In this course you will learn to use basic math operations working with budgets, paychecks, and banking and saving.

Consumer Math S2

Credit: One-half Grade: 11,12 Prerequisite: Consumer Math S1

During this semester you will use basic math operations working with credit cards, housing options, basic needs, owning vehicles, and recreation.

Pre-Calculus S1 (MATH 107)

Credit: HS: One-half/College: 3 Grade: 11,12 Prerequisite: Advanced Algebra with grade of "C" or better, 3.0 GPA

Dual credit option available through VCSU. See Page 24.

This course is a continuation and extension of topics covered in Advanced Algebra, including relations, functions, equations, inequalities, polynomials, rational functions, exponentials, logarithms, trigonometric and inverse trigonometric functions, trigonometric identities, equations and applications. It is recommended if you plan to enter a college course of study involving math or science, particularly engineering. This course carries the option of earning dual credit from VCSU (MATH 107), and also aligns with many university general math requirements (please check with your college of choice). ***Note: Student must pass Accuplacer test by the end of May 2022 to be accepted into this Dual Credit course for the 2022-23 school year.***

Pre-Calculus S2

Credit: One-half Grade: 11,12 Prerequisite: Pre-Calculus S1

In this semester you will study a continuation and extensions of topics covered in Pre-Calculus S1, including systems of equations, analytic geometry, discrete mathematics, and an introduction to calculus. This course is recommended if you plan to enter a college course of study involving math or science, particularly engineering. To enroll in this course, you must also take Pre-Calculus S1.

Calculus I & II (MATH 165)

Credit: HS: 1/College: 4 Grade: 12 Prerequisite: Pre-Calculus

Dual credit option available through VCSU. See Page 24.

In this course you will study limits, continuity, functions, derivatives, integrals, the Mean Value Theorem, the Fundamental Theorem of Calculus, and applications. This class is recommended if you plan to enter a college course of study involving math or science, particularly engineering. This course also aligns with VCSU's requirements for *Math 165* and carries the option of earning dual credit.

MUSIC

Credits Required: None

Varsity Band S1

Credit: One-half Grade: 9,10 Prerequisite: None

This course is a combined performance driven / music appreciation class with most emphasis on playing an instrument with the band. You will get an introduction to pep band music and concert band music. You will learn marching band concepts, perform in homecoming parades, half-time shows at VCHS & VCSU football games, the Christmas concert, various pep band engagements and community events. You will also study music theory, music history and social values needed to succeed in an instrumental ensemble.

Two individual lessons are required to monitor your technique, tone, breathing, ranges, and attitudes. Skills will also be offered to help you audition for honor bands and solo contests. Performances may include the VCSU homecoming parade, NDSU homecoming parade, etc.

Varsity Band S2

Credit: One-half Grade: 9,10 Prerequisite: None

In this semester course you will participate in pep band engagements, honor bands, mid-year concert, the “Jazzin” spring concert, and Memorial Day parade. Music theory and music history will be presented as well as appropriate “standard” band material for this grade level. You will develop an appreciation for music of many different styles and ethnic backgrounds. Two individual lessons are also required to monitor your technique, tone, breathing, ranges, and attitudes. Performances may include the Shrine Circus, UND Band Day, etc.

Varsity Choir S1

Credit: One-half Grade: 9,10 Prerequisite: None - Reading solfege, music notation & symbols is recommended

You will be exposed to a wide variety of vocal music, elements of sight-reading, listening, general musicianship, and music theory. Two voice lessons are required where you will work on individual skills in breathing, resonance, tension, and diction for your developing voice. You are also expected to participate in ensemble experiences and perform in the holiday and *Café* concerts.

Varsity Choir S2

Credit: One-half Grade: 9,10 Prerequisite: None - Reading solfege, music notation & symbols is recommended

In this course you will continue with additional sight-reading, listening, musicianship and music theory. Two voice lessons are required to help improve your breathing skills, resonance, tension and diction. You may have opportunities for solo and ensemble experiences at the regional music competition, and you are expected to perform in the *Café* and May concerts.

Senior Band S1

Credit: One-half Grade: 11,12 Prerequisite: Varsity Band

This performance-driven course is an introduction to new pep band and concert band music and a review of marching band concepts. You will perform in homecoming parades, VCHS and VCSU football half-time shows, Christmas concert, various pep band engagements and community events. You will also study music theory, music history and social values needed to succeed in an instrumental ensemble. Two individual lessons are required to monitor your technique, tone, breathing, ranges, and attitudes. Skills will also be offered to help you audition for honor bands and solo contests. An optional audition for VCHS Jazz Band will also be held early in this semester. Performances may include the VCSU homecoming parade, NDSU homecoming parade, etc.

Senior Band S2

Credit: One-half Grade: 11,12 Prerequisite: Varsity Band

In this semester course you will perform at various pep band engagements, honor bands, the mid-year “heavy” concert, the spring “Jazzin” concert, and Memorial Day parade. You will also have an opportunity to participate in a large group contest and travel to a major concert band competition held every other year. You will continue to study music theory and music history material. New band music will be presented as well as “standards” of the concert band world. You will develop an appreciation for music of many different styles and ethnic backgrounds. One individual lesson is also required to monitor your technique, tone, breathing, ranges, and attitudes. Recent years have included the Heritage Festival in New York City. Other performances may include the Shrine Circus, UND Band Day, etc.

Senior Choir S1

Credit: One-half Grade: 11,12 Prerequisite: None - Reading solfege, music notation & symbols is recommended

In this course you will broaden your vocal skills by learning about music from different cultures and regions and more advanced music theory. You will develop additional performance skills by singing alone and with ensemble groups. Two voice lessons are required to work on breathing, resonance, tension, and diction, and you are expected to perform in the holiday and *Café* concerts.

Senior Choir S2

Credit: One-half Grade: 11,12 Prerequisite: None - Reading solfege, music notation & symbols is recommended

You will continue work on your vocal skills in this course and will have opportunities for solos and ensemble experiences at the regional and state competitions. Two voice lessons are required, and you are expected to perform in the *Café* and May concerts.

Guitar S1

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course is limited to twenty (20) students, with preference given first to Seniors, then Juniors, then Sophomores. In this course you will receive beginning instruction on the guitar. You will learn 1st position notes, open chords in several chord progressions, basic bass accompaniment, and a variety of playing techniques that include music notation, music fundamentals, beginning theory, and songs. You will be evaluated regularly on your playing proficiency and with written exams. You must provide your own guitar, a tuner, and extra set of strings for this class.

Guitar S2 (Can be ½ semester or full year)

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This course is limited to twenty (20) students, with preference given first to Seniors, then Juniors, then Sophomores. You must be proficient on 1st position notes, be able to play all open chords in several chord progressions, and be able to recognize them on paper, with fundamental knowledge of treble clef notes. This course includes notation on playing major scales, barre chords, more finger picking and tablature. You will be evaluated regularly on your playing proficiency and with written exams. You must provide your own guitar, a tuner, and extra set of strings for this class also.

PHYSICAL EDUCATION*Credits Required: One*

Physical Education 1 - Required

Credit: One-half Grade: 9-12 Prerequisite: None

You will participate in activities designed to promote physical fitness, such as aerobic and strengthening exercises, as well as knowledge of and participation in lifetime sport activities such as softball, basketball, volleyball, badminton, etc.

Physical Education 2 – Required

Credit: One-half Grade: 10-12 Prerequisite: None

You will participate in activities designed to promote physical fitness, such as aerobic and strengthening exercises, as well as knowledge of and participation in lifetime sport activities such as softball, basketball, volleyball, badminton, etc.

Fitness/Conditioning Activities

Credit: One-half Grade: 10,11,12 Prerequisite: None

This course emphasizes conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness. Students will be given the opportunity for regular, supervised workouts while learning power techniques and safety. The course will also serve to develop knowledge, experience, and skills in a variety of sports or activities.

Concepts of Fitness and Wellness DC S1 & S2

Credit: HS: One-half/College: 2 Grade: 10,11,12 Prerequisite: any 1/2 credit of Physical Education; GPA of 3.0 or better

This course is only offered for Dual Credit through VCSU. See page 24.

This course is designed to teach the facts about exercise and physical fitness. This general education course combines lecture about the theory of exercise and health issues with laboratory, activity, and technology experiences to introduce the student to concepts of holistic living.

Adaptive PE

Credit: One-half Grade: 9,10,11,12 Prerequisite: IEP placement

This course teaches physical development activities for handicapped students, based upon individual needs and abilities.

SCIENCE*Credits Required: Three*

Physical Science S1 - Required

Credit: One-half Grade: 9 Prerequisite: None

You will learn elementary fundamentals of chemistry by using labs and classroom techniques. You will learn about atoms, elements, how to write chemical formulas, types of reactions, and how to balance them.

Physical Science S2 - Required

Credit: One-half Grade: 9 Prerequisite: None

You will develop a basic understanding of physics, which will include the study of electricity, measurements, forces, motion, waves, sound and light.

Biology S1 – Required

Credit: One-half Grade: 10 Prerequisite: Physical Science S2

In this General Biology course, you will develop a fundamental understanding of life processes, cell biology, photosynthesis, respiration, genetics and evolution.

Biology S2 – Required

Credit: One-half

Grade: 10

Prerequisite: Biology S1

This course will focus on Zoology. You will develop an in depth understanding of the kingdom Animalia, both invertebrates and vertebrates, while often briefly exploring Plantae, Fungi, Protista, Archaeobacteria, and Eubacteria as well as Viruses.

General College Biology I DC S2 (BIOL 151)

Credit: HS: One-half/College: 4

Grade: 11,12

Dual credit course offered through VCSU. See page 24.

Prerequisite: GPA of 3.0 or better

A two-semester sequenced study of the fundamental concepts of Biology through lecture and laboratory work. This course focuses on concepts such as classification, evolution, and ecology. Recommended for students interested in science (required for certain majors and minors).

Advanced Biology S1

Credit: One-half

Grade: 11,12

Prerequisite: Biology and Chemistry

This course presents a study of the anatomy and physiology of the human body, with extensive laboratory exploration of the gross and microscopic anatomy of most systems. You will get an introduction to anatomy, tissues (histology), integumentary system, skeletal system, joints, muscular system, and general functions of the nervous system. Also included will be a review of biochemistry, chemistry, metabolism, and cell biology. This is a rigorous course for those who intend to enter a college program related to science, medicine, and health careers, or for the student who is simply interested in how the human body works.

Advanced Biology S2

Credit: One-half

Grade: 11,12

Prerequisite: Advanced Biology S1

In this semester course you will study the nervous system (brain, spinal cord & senses) endocrine system, blood, cardiovascular system, lymphatic system, digestive system, and respiratory system. It is a rigorous course for those who intend to enter a college program related to science, medicine, and health careers, or for the student who is simply interested in how the human body works.

STEM Seminar I

Credit: One-half

Grade: 11,12

Prerequisite: None

STEM Seminar is a project-based course in which students use Science, Technology, Engineering and Math to solve real world problems. STEM focuses on the basics of the Engineering Design Process engaging students in hands on interdisciplinary application. In this course, students uncover and acquire a cohesive set of concepts, competencies, and dispositions of science, technology, engineering, and mathematics that they transfer and apply in both academic and real-world contexts in order to be globally competitive in the 21st Century. There is no set textbook, no quizzes, and no tests. All grading will utilize a rubric based on 21st century skills, the creation of a product, and use of the engineering design process. STEM careers will also be explored. This class focuses on career ready and military ready skills. Students that are prepping to be college ready should take chemistry, as chemistry's focus is college ready.

STEM Seminar II

Credit: One-half

Grade: 11,12

Prerequisite: None

STEM Seminar II is a continuation of STEM Seminar I. Students will continue to use Science, Technology, Engineering and Math to solve real world problems. There is no set textbook, no quizzes, and no tests. All grading will utilize a rubric based on 21st century skills, the creation of a product, and use of the engineering design process. STEM careers will also be explored. This class focuses on career ready and military ready skills. Students that are prepping to be college ready should take chemistry, as chemistry's focus is college ready.

Chemistry S1

Credit: One-half

Grade: 11,12

Prerequisite: Biology, Algebra I, and Geometry

Recommendation: Take in conjunction with or after Advanced Algebra

In this course you will focus on atomic theory, the periodic table, stoichiometry and chemical reactions. This course enhances problem solving, critical thinking, and abstract thinking which will be beneficial in all aspects. It is recommended as a third science if you plan to attend a four-year college as chemistry focuses on being college ready.

Chemistry S2 (CHEM 115)

Credit: HS: One-half/College: 4

Grades: 11,12

Dual Credit option available through VCSU. See Page 24.

Prerequisite: Chemistry S1. For Dual Credit: Must have GPA of 3.0 or better.

This semester will focus on physical chemistry, gases, solutions, energy, acid-base chemistry, equilibrium, and redox. It enhances problem solving, critical thinking, and abstract thinking which will be beneficial in all aspects. This course is recommended as a third science if you plan to attend a four-year college as chemistry focuses on being college ready.

Physics S1

Credit: One-half

Grade: 11,12

Prerequisite: Advanced Algebra and Chemistry

Chemistry may be taken in conjunction with physics with department approval.

In this semester you will study Newtonian physics to include motion (1D and 2D), Newton's Laws, force, work, energy, gravity, momentum, rotational motion, and equilibrium. Physics is recommended if you plan to begin a college course of study involving science, math, medical or engineering, or if you want to improve your problem solving and critical thinking skills.

Physics S2

Credit: One-half

Grade 11,12

Prerequisite: Physics A

Chemistry may be taken in conjunction with physics with department approval.

In this course you will study the interrelations and interdependence of the physical world around you. Topics will include fluid mechanics, thermodynamics, vibrations and waves, light and sound, magnetism, and electricity, and subatomic particle physics.

Physics is recommended if you plan to begin a college course of study involving science, math, medical or engineering, or if you want to improve your problem solving and critical thinking skills.

SOCIAL STUDIES*Credits Required: Three***North Dakota Studies S1** Grade: 9,10,11,12

Prerequisite: None

Credit: One-half

You will examine many factors that have affected the history, culture, government and development of North Dakota. This course will investigate the geography of North Dakota including human and physical features. You will study early people of North Dakota with special emphasis on Native Americans. You will also learn the importance of agriculture, other industries, and current issues affecting North Dakota.

World History S1 - Required

Credit: One-half

Grade: 10

Prerequisite: None

This course study begins at 3500 B.C. with the Prehistory of the Neolithic Revolution and dawn of civilization. Major topics will include Ancient Egypt, Mesopotamia, Ancient Greece, and the Rise of Alexander the Great. You will study Rome from its rise to fall, its influence on the modern world today, and the creation of the Byzantine Empire. The final eras studied are the Middle Ages and Renaissance and Reformation. You will get an in-depth look at crusades, rise of feudalism, Black Plague, and the impact of the renaissance on Western Europe.

World History S2 - Required

Credit: One-half

Grade: 10

Prerequisite: World History S1

In this semester you will study the Age of Exploration and the effects of explorers and visionaries in history. You will learn about revolutions, their results, and how they changed people's way of life. You will get an in-depth look at the world economies before WWI, then focus on WWI and effects on the U.S., the world, and the subsequent rise of nations and political leaders. You will study WWII, the principal of alliances, the creation of the United Nations, and you will get a thorough look at the rise of Nazi Germany, imperialistic Japan, the Holocaust, and the aftermath of WWII. The end of the course will cover the challenges of the world today and hopes for the future.

United States History S1 – Required

Credit: One-half

Grade: 11

Prerequisite: None

In this course you will conduct an in-depth study of events and people in the United States beginning with a brief study of the Constitution and citizenship. This course will then advance to the Civil War and progress forward through the Great Depression.

United States History 11 DC S1 (HIST 103)

Credit: HS: One-half/College: 3

Grade: 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: GPA of 3.0 or better

This course is a survey of United States History from Reconstruction through the Cold War. Attention is given to social, economic, and political history, as well as the role of minorities and women in the development of modern American society. Topics addressed include segregation, immigration, major political movements, U.S. foreign policy, and civil rights.

United States History S2 – Required

Credit: One-half

Grade: 11

Prerequisite: United States History S1

This semester course will be an in-depth study of events and people in the United States beginning with World War II and advancing through modern history.

United States History 11 DC S2 (HIST 104)

Credit: HS: One-half/College: 3

Grade 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: United States History 11 S1

This course will survey American History from the post-Civil War Reconstruction through the Reagan Administration. You will learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance. Solid reading and

writing skills are necessary to succeed, along with a willingness to devote considerable time to homework and study. Emphasis is on critical and evaluative thinking skills, essay writing, interpretation of original documents, and historiography.

Sociology S2

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

This class will discuss global citizenship and what a positive global citizen looks like. Topics will include self-esteem, diversity, civic responsibilities, and communication strategies. Students will learn through hands-on activities, classroom discussion, current news and social events, and roll plays.

Psychology-Online Only S2 (PSYC 111)

Credit: HS: One-half/College: 3 Grade: 10,11,12 Prerequisite: GPA of 3.0 or better

Dual credit course offered through VCSU. See Page 24.

This course is a survey of the scientific study of behavior and mental processes. It is designed to introduce a variety of psychological topics including: the brain, sensation and perception, memory, learning, cognition, personality, social psychology, psychological disorders and therapies.

Economics – Required

Credit: One-half Grade: 12 Prerequisite: World History and United States History

You will study the use of limited resources, and the effort to balance the relationship between wants and limited resources. This course also includes a study of money, banking, government spending and taxation, inflation, business cycles, and the stock market.

American Government – Required

Credit: One-half Grade: 12 Prerequisite: World History and United States History

You will study the history of government as well as present day government. You will take a piece by piece look at the United States Constitution while also studying other documents, the voting process, political parties, and civil rights.

TECHNOLOGY & ENGINEERING EDUCATION

Credits Required: None

NOTE: All of the Technology & Engineering Education courses are CTE courses.

Foundations of Technology

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

In this course you will learn that technology consists of key concepts and processes and is the basis for all that we have and do. You will design and develop innovations and engineer solutions to gain an understanding of technology. Mathematics and science contribute to the unit topics.

Invention and Innovation

Credit: One-half Grade: 9,10,11,12 Prerequisite: None

You will participate in engineering design activities to understand how criteria, constraints, and processes affect designs. Brainstorming, visualizing, modeling, constructing, testing and refining designs will all be involved.

ADA Robotics

Credit: One-half
per semester Grade: 9,10,11,12 Prerequisite: None

Students will use the brand new V5 Vex Robotics kits to design robots that they control with joysticks. They will learn to write programming code and apply engineering principles to gear ratios, electrical loads, leverage, and motion. There will also be a break away session to write code for video games.

Banner and Canvas Design (Can be ½ semester or full year)

Credit: One
per semester Grade: 9,10,11,12 Prerequisite: None

Students will learn how to design and create banners, canvases, vinyl decals, t-shirts, and plasma cut signs (Jimmy Don signs). Emphasis will be on the process of producing these items, but general entrepreneurial business aspects of marketing, finance, customer service, and production control will also be introduced.

Banner and Canvas Design II

Credit: One per semester Grade: 10,11,12 Prerequisite: Banner and Canvas Design

Students will get a deeper understanding of design, in depth use of CoreIDRAW along with business aspects of marketing, finance, customer service, and production control.

EDUCATION

Credits Required: None

Introduction to the Teaching Profession S1 (EDUC 251)

Credit: HS: One-half/College: 2 Grade: 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: None

This course is for students interested in the teaching profession at any grade K-12. Students will gain experience in teaching through peer teaching activities, and will learn the process of planning, implementing, evaluating, and reflecting on lessons taught. This course aligns with VCSU's requirements for EDUC 251.

Introductory Field Experience S2 (EDUC 252)

Credit: HS: One-half/College: 2 Grade: 11,12

Dual credit course offered through VCSU. See Page 24.

Prerequisite: Introduction to the Teaching Profession

This course gives students an opportunity to apply the teaching skills learned from Introduction of the Teaching Profession. Students will complete 40 hours of field experience during flexible scheduled times at an elementary or secondary school classroom in Valley City. Students will also meet together as a class regularly to discuss and reflect on field experiences. This course aligns with VCSU's requirements for EDUC 252.

DUAL CREDIT COURSES

If you meet course requirements in these classes, you can receive college credit. College tuition fees must be paid, and costs will vary.

Valley City State University - GPA of 3.0 or higher is needed.

To take a VCSU Dual Credit English or Math class as a Senior (if you took regular English 11 as a Junior), you must have qualifying ACT scores. For Dual Credit English courses, you must have an ACT English composite score of 23 or greater, and for Dual Credit Math, you must have an ACT math composite score of 21 or greater. The ACT test is given to Juniors in March, with no cost. If you do not meet the ACT composite requirements, you must then take an Accuplacer test.

To take a VCSU Dual Credit English or Math class as a Junior, you must have qualifying Accuplacer scores of—256 or greater on the Accuplacer Next Gen Writing Test (English), and/or 237 or greater on the Accuplacer Next Gen Advanced Algebra Functions Test or 255 or higher on the Accuplacer Next Gen Statistics Test (Math). The Accuplacer tests are given in the spring and must be completed by the end of the preceding academic year before Dual Credit classes will be taken.

VCHS Class Name	Offered at Grade Level	VCSU Class Name	Credit
Intro to Computer Information Systems DC.....	10-12.....(Page 8)	CIS 170-Intro to Computer Information Systems	3
Accounting II DC.....	10-12.....(Page 8)	ACCT 200 – Elements of Accounting I	3
Concepts of Fitness and Wellness DC	10-12.....(Page 20)	HPER 100 – Concepts of Fitness and Wellness	2
Chemistry DC.....	11-12.....(Page 21)	CHEM 115 – Introductory Chemistry	4
General College Biology DC.....	11-12.....(Page 21)	BIOL 150 – General Biology I	4
US History 11 (S1) DC	11-12.....(Page 22)	HIST 103 – United States to 1877	3
US History 11 (S2) DC	11-12.....(Page 22)	HIST 104 – United States History to Present	3
College Comp I DC.....	11-12.....(Page 16)	ENGL 110 – College Composition I	3
College Comp II DC.....	11-12.....(Page 16)	ENGL 120 – College Composition II	3
Mythology DC.....	11-12.....(Page 16)	ENGL 232 – Mythology	3
Pre-Calculus A DC.....	11-12.....(Page 18)	MATH 107 – Pre-Calculus	3
Calculus I DC	12.....(Page 18)	MATH 165 – Analytic Geometry & Calculus I	4
Fundamentals of Public Speaking DC	11-12.....(Page 16)	COMM 110 – Fundamentals of Public Speaking	3
Professional Writing w/Literature DC	11-12.....(Page 16)	ENGL 125 – Introduction to Professional Writing	3
Psychology DC.....	10-12.....(Page 23)	PSYC 111-Introduction to Psychology	3
Introduction to the Teaching Profession.....	11-12.....(Page 24)	EDUC 251- Introduction to the Teaching Profession	2
Introductory Field Experience.....	11-12.....(Page 24)	EDUC 252- Introductory Field Experience	2
Spanish II DC.....	10-12.....(Page 17)	SPAN 102- 1 st Year Spanish II	3
Medical Terminology DC.....	10-12.....(Page 13)	BIOL 171- Medical Terminology	3

NOTES
