## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01011 | Introduction to Agriculture | 9-12 | 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 - emphasis will be placed on safety and proper use of tools and equipment; 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. <br> This applied course introduces students to agricultural sciences emphasizing technical skills, entrepreneurship, and occupational opportunities. Units may include agricultural construction, food, fiber science, supervised agricultural experiences, and leadership development. <br> Agricultural mechanics units are designed to develop skills in selecting, operating, and maintaining engines, hydraulics, and agricultural machinery and tractors. Skills in equipment operation and maintenance, determining a bill of materials, construction techniques, metal fabrication, and joining processes of metals and alloys will be included. <br> Emphasis is on problem-solving and scientific reasoning applied to real-world problems integrating knowledge from the life and earth sciences. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01012 | Foundations of Agriculture | 9-12 | This applied course is designed to enhance students' perception of 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 - emphasis will be placed on safety and proper use of tools and equipment; 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. <br> This applied course introduces students to agricultural sciences emphasizing technical skills, entrepreneurship, and occupational opportunities. Units may include agricultural construction, food, fiber science, supervised agricultural experiences, and leadership development. <br> Agricultural mechanics units are designed to further develop skills in selecting, operating, and maintaining engines, hydraulics, and agricultural machinery and tractors. Skills in equipment operation and maintenance, determining a bill of materials, construction techniques, metal fabrication, and joining processes of metals and alloys will be included. <br> Emphasis is on problem-solving and scientific reasoning applied to real-world problems integrating knowledge from the life and earth sciences. Foundations of Agriculture can be a continuation of Introduction to Agriculture or offered in alternating years with Introduction to Agriculture. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01021 | Agriscience Technology I | 9-12 | Agriscience Technology courses integrate biological and technological concepts with principles of agriculture. Courses are designed in sequences to provide experiences in the subject matter. Units are selected to develop knowledge and skills about animal and plant nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology. Genetic engineering, biotechnology, plant propagation techniques, agricultural production technologies, marketing technologies, aquaculture, animal health, and small animal care may be taught. <br> These courses integrate leadership and supervise agricultural experience programs. Career opportunities and educational preparation are examined. Learning activities are varied with classroom, laboratory, and field experiences. <br> Note: These courses can be taught for Agricultural Education credit only. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |
| 01022 | Agriscience Technology II | 9-12 | Agriscience Technology courses integrate biological and technological concepts with principles of agriculture. Courses are designed in sequences to provide experiences in the subject matter. Units are selected to develop knowledge and skills about animal and plant nutrition, reproduction, diseases, breeding, genetics, anatomy, and physiology. Genetic engineering, biotechnology, plant propagation techniques, agricultural production technologies, marketing technologies, aquaculture, animal health, and small animal care may be taught. <br> These courses integrate leadership and supervise agricultural experience programs. Career opportunities and educational preparation are examined. Learning activities are varied with classroom, laboratory, and field experiences. <br> Note: These courses can be taught for Agricultural Education credit only. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.


## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01034 | Agriculture Sales and Service | 10-12 | To provide students with skills necessary for entry into employment or furthering education in agriculture sales and service. The course deals with business organizations, business structures, job responsibilities, applications, interviewing, human relations, marketing, selling, displaying, using business machines, business accounting, and management skills. Learning activities are varied with classroom, laboratory, and field experiences. Leadership development and supervised agricultural experience programs are integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01035 | Agricultural Business Management | 10-12 | A course 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 integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01043 | Agricultural Mechanics Technology I | 9-12 | Agricultural Mechanics courses are designed to reinforce and extend students' understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in mechanics-related fields. Students will be exposed to mechanical, fluid, electrical, and thermal power that is related to the field of agriculture. The course sequence is designed to provide students with applied activities, including metal fusion (welding), structures, surveying, electrical wiring principles, agricultural power and equipment, plumbing, electric motors and controls, CNC, robotics, CADD, Lasers, GIS, and GPS systems. Leadership development and supervised agricultural experiences are integral to these courses. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |
| 01044 | Agricultural Mechanics Technology II | 9-12 | Agricultural Mechanics courses are designed to reinforce and extend students' understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in mechanics-related fields. Students will be exposed to mechanical, fluid, electrical, and thermal power that is related to the field of agriculture. The course sequence is designed to provide students with applied activities, which may include metal fusion (welding), structures, surveying, electrical wiring principles, agricultural power and equipment, plumbing, electric motors and controls, CNC, robotics, CADD, Lasers, GIS, and GPS systems. Leadership development and supervised agricultural experiences are integral to these courses. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01045 | Agricultural Mechanics Power Systems | 9-12 | Agricultural Mechanics courses are designed to reinforce and extend students' understanding of applied mechanical applications by associating scientific principles and concepts with relevant applications in mechanics-related fields. Students will be exposed to fluid, electrical, and thermal power that are related to the field of agriculture. The course is designed to provide students with applied activities, which may include small engine maintenance and repair, agricultural power and equipment, electric motors and controls, robotics, renewable energy, and precision ag systems. Leadership development and supervised agricultural experiences are integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01046 | Agricultural Welding and Fabrication | 10-12 | This course provides students in agriculture an opportunity to reinforce and extend their understanding of applied mechanical applications. Students will be exposed to mechanical, electrical, and thermal power associated with agricultural welding. Applied activities develop an understanding and skill development in metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate and maintain a variety of agricultural machinery and equipment. Processes covered may include Oxyfuel Cutting/Heating/Welding, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Air-carbon Arc Cutting, Plasma Arc Cutting, Safety and Metal Fabrication. In addition, record-keeping, communication skills, employability, and human relations skills will be covered. Leadership development and supervised Agricultural Experiences (SAEs) are also integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |
| 01047 | Advanced Ag Welding and Fabrication | 10-12 | This course can be a continuation of 01046 Agricultural Welding and Fabrication or be offered in alternating years. <br> This course provides students in agriculture an additional opportunity to reinforce and extend their understanding of applied mechanical applications. Advanced applications will further develop knowledge and skill development in metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate and maintain a variety of agricultural machinery and equipment. Processes covered may include Oxyfuel Cutting/Heating/Welding, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Air-carbon Arc Cutting, Plasma Arc Cutting, Safety and Metal Fabrication projects. In addition, record-keeping, communication skills, employability, and human relations skills will be covered. Leadership development and supervised Agricultural Experiences (SAEs) are also integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01053 | Botany/ <br> Horticultural Science I | 9-12 | These courses prepare students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures. Topics include soils, plants, plant identification, and plant entomology. Courses examine the importance of plant cell structures, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers, and reproduction of plants. Students may be introduced to the biological, environmental, conservation, and ecological concepts encountered in our environment. Landscape design units will prepare students to design, construct, and maintain planted areas and devices for beautifying home grounds and other human habitation and recreation areas. These courses will reinforce and extend students' understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Leadership development and supervised agricultural experience programs are also integral to this course. <br> Note: These courses can be taught for Agricultural Education credit only. For Science credit, Botany/Horticultural Science I can be found under Science. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: |
| 01054 | Botany/ <br> Horticultural Science II | 9-12 | These courses prepare students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures. Topics include soils, plants, plant identification, and plant entomology. Courses examine the importance of plant cell structures, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers, and reproduction of plants. Students may be introduced to the biological, environmental, conservation, and ecological concepts encountered in our environment. Landscape design units will prepare students to design, construct, and maintain planted areas and devices for beautifying home grounds and other human habitation and recreation areas. These courses will reinforce and extend students' understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Leadership development and supervised agricultural experience programs are also integral to this course. <br> Note: These courses can be taught for Agricultural Education credit only. For Science credit, Botany/Horticultural Science II can be found under Science. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01061 | Livestock Production | 10-12 | This course is designed to prepare students for careers in animal science and production in species, including, but not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. The student will demonstrate technical skills relating to the interrelated human, botanical, scientific, and technological dimensions of animal systems and be able to assess the importance of the United States' impact on world commodity markets while applying the principles of livestock breeding and nutrition in predicting the impact of current advances in genetics. The student is expected to describe common veterinary procedures and skills, practice proper animal restraint techniques, demonstrate identification techniques, and demonstrate effective management strategies. The student will learn the anatomy and physiology related to nutrition, reproduction, health, and management of domesticated animals while understanding the nutritional requirements of ruminant and nonruminant animals. The student is expected to discuss feeding practices and feed quality issues, explain animal genetics and reproduction, and research current and emerging technologies in animal reproduction. The student identifies animal pests and diseases and disease control, treatment, and prevention methods. The student knows the factors impacting commodity prices and costs. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |
| 01062 | Equine Science | 10-12 | This course is designed to provide students with opportunities to learn, reinforce, apply, and transfer their animal systems knowledge and skills (including, but not limited to, horses, donkeys, and mules.) The student will analyze the selection of horses, how to provide proper nutrition using accepted protocols and processes, describe the anatomy and physiology of horses, and select equipment and facilities which demonstrate methods of handling and breeding horses safely. The student will compare, and contrast issues affecting the industry and describe biotechnology-related issues related to the equine field. The student will also learn the employability characteristics of a successful employee in the field of equine science by participating in laboratory-based or other supervised agricultural experiences and learning from the challenging hands-on approach in equine activities. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01063 | Natural/ Environmental Resources | 9-12 | This course allows 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 integral to this course. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01066 | Small Animal Care | 9-12 | This course is designed to teach students about the management of small animals, which may include, but are not limited to, small mammals, amphibians, reptiles, avians, dogs, and cats. The student will understand the importance of responsible small animal ownership by explaining the domestication and use of small animals, the influence small animals and the small animal industry on society, and the hazards associated with working in the small animal industry (including transmittance of disease and handling of dangerous chemicals). The student will evaluate current topics in animal rights and animal welfare, thus understanding the care and management requirements for a variety of small animals and be able to discuss the physical characteristics of each species studied; list the breeds or types of each species; discuss the habitat, housing, and equipment needs for each; compare and contrast nutritional requirements; describe and practice common methods of handling, and use available laboratory equipment to perform procedures. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01067 | Veterinary Science | 11-12 | This course is designed to prepare students for careers in animal science by introducing them to veterinary practices related to large and small animal species. The student will participate in laboratory and field investigations and demonstrate safety using critical thinking, scientific reasoning, and problem-solving to make informed decisions. They will research and describe the history of veterinary medicine, current topics, the importance of animals in society, and the professional ethics and laws related to veterinary medicine. The student will learn to explain the human-animal bond and describe the legal aspects of animal welfare. The student will identify anatomical structures and systems of animals and correct terminology while exploring animal management as it relates to animal identification, animal characteristics, and behavioral temperament (i.e., normal behavior compared to sick.) The student will evaluate animal diseases and identifies internal and external parasites and can evaluate an animal's health during a clinical examination while safely operating and maintaining equipment used in veterinary science. The student will also learn to determine nutritional requirements and the importance of nutrition in maintaining a healthy animal. The student will be conscious of the procedures, skills, and objectives included in the job description of an animal care assistant. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education - 5-12 or 9-12 |
| 01068 | Agricultural Processing | 10-12 | This course is designed to introduce students to the processing of agricultural products. The course will include the processing of food, fiber, and material product processing for the global economy will be emphasized. Personal communication skills, human relations skills, leadership development skills, and supervised agricultural experiences will be emphasized. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01069 | World Agricultural Science and Technology | 10-12 | A course designed to introduce students to global agriculture. This course also includes agricultural career development, leadership, communications, and personal finance. <br> Note: This course can be taught for Agricultural Education credit only. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01073 | Agriculture III | 10-12 | This course develops agricultural skills necessary for employment, entrepreneurship, or further education in agriculture and agricultural occupations. Units may include crop and livestock production, farm business management, agribusiness, horticulture, natural resources, agricultural mechanics, aquaculture, and water management. Leadership development and supervised agricultural experiences will also be emphasized. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01074 | Agriculture IV | 10-12 | This course develops agricultural skills necessary for employment, entrepreneurship, or further education in agriculture and agricultural occupations. Units may include crop and livestock production, farm business management, agribusiness, horticulture, natural resources, agricultural mechanics, aquaculture, and water management. Leadership development and supervised agricultural experiences will also be emphasized. This course can be a continuation of Agriculture III or can be offered in alternating years with Agriculture III. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |
| 01990 | Individual Agricultural Studies | 9-12 | This course provides students in agriculture an opportunity to expand and explore the fields of agriculture, leadership, and personal development individually. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 01080 | CASE Introduction to AFNR | 9-12 | Introduction to AFNR (Agriculture, Food, and Natural Resources) will introduce students to the world of agriculture, the pathways they may pursue, and the science, mathematics, reading, and writing components they will use throughout the CASE curriculum. Student experiences will involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01080-CASE Introduction to AFNR - 9-12 |
| 01081 | CASE Principles of Agricultural Science Animal | 9-12 | Principles of Agricultural Science - Animal is a foundation-level course designed to engage students in hands-on laboratories and activities to explore the world of animal agriculture. Student experiences will involve the student of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01081-CASE Introduction to AFNR <br> - 9-12 |
| 01082 | CASE Principles of Agricultural Science Plant | 9-12 | Principles of Agricultural Science - Plant is a foundation-level course that will teach students about the form and function of plant systems. Students are immersed in inquiry-based exercises filled with activities, projects, and problems to teach them plant concepts through laboratory and practical experiences. Student experiences will include soils, hydroponics, plant anatomy and physiology, taxonomy, growing environments, sexual reproduction, asexual reproduction, insects and diseases, and production and marketing. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA programs and activities. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01082-CASE Introduction to AFNR - 9-12 |

HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01083 | CASE Agricultural Power \& Technology | 9-12 | Agricultural Power and Technology is a foundation-level course designed to prepare students for various career opportunities in agricultural engineering. Students are immersed in inquiry-based exercises that tie in the math and science of agricultural mechanics and engineering. Students apply technical skills while becoming competent in operating, repairing, engineering, and designing agricultural tools and equipment. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 01083 -CASE Agricultural Power and Technology <br> -9-12 |
| 01084 | CASE Natural Resources \& Ecology | 9-12 | Natural Resources and Ecology course is a foundation-level course that provides students with various experiences in natural resources and ecology. Students will explore hands-on projects and activities while studying land use, water quality, stewardship, and environmental agencies. The study of the natural world, including biomes, land, air, water, energy, use, and care, as well as a focus on issues surrounding man's interaction with the earth, will be addressed in this course. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 01084 - CASE Natural Resources and Ecology <br> -9-12 |
| 01085 | CASE Animal \& Plant Biotechnology | 9-12 | Animal and Plant Biotechnology is a specialization course that provides students with experiences in industry-appropriate applications of biotechnology related to plant and animal agriculture. Students are expected to become proficient at biotechnological skills involving micro pipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Research and experimental design will be highlighted. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01085 CASE Animal \& Plant Biotechnology -9-12 |
| 01086 | CASE Food Science \& Safety | 9-12 | Food Science and Safety is a specialization course in which students complete hands-on activities, projects, and problems that simulate actual concepts and situations in the food science and safety industry, allowing students to build content knowledge and technical skills. Students will investigate areas of food science, including food safety, food chemistry, food processing, food product development, and marketing | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01086 CASE Food Science and Safety <br> - 10-12 |
| 01087 | CASE Agricultural Business Foundations | 9-12 | Agricultural Business Foundations introduces students to business management in agriculture, mathematics, reading, and writing components woven in the context of agriculture. Students will use the introductory skills and knowledge developed in this course throughout subsequent CASE courses. The course includes concepts in starting a business, financial documents, risk management, and writing a business plan. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01087 CASE Agricultural Business Foundations -9-12 |

December 6, 2022

## HIGH SCHOOL AGRICULTURAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Agricultural Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01088 | CASE <br> Environmental Science Issues | 9-12 | The course is a specialization level course that enables students to research, analyze, and propose sustainable solutions to environmental issues. Students are immersed in inquiry-based exercises filled with activities, projects, and problems, which develop data acquisition and analysis techniques, critical thinking and evaluation abilities related to environmental issues, and independent research and problem-solving. | 1 Max credit $=1$ | License Code: 01088 CASE Environmental Science Issues <br> - 9-12 |
| 01993 | Community Development | 9-12 | This course provides students in agriculture an opportunity to understand the principles and fundamentals of community development and gain an appreciation of essential community needs. Students will have the opportunity to study the community development process and select, plan, and implement a community development project or projects. Community leadership development and service learning are integral to the success of this course. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |
| 01995 | Supervised Agricultural Experience Program | 9-12 | This course provides credit for student agricultural experience exploration. Fulfillment of the standards outlined in the Policy Statement for Supervised Agricultural Experience Programs in agricultural education in North Dakota. All students must complete a minimum program of supervised agricultural experience; those who wish to exceed the minimum may earn $1 / 4,1 / 2$, or 1 credit each year. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |
| 01999 | Cooperative Work Experience | 11-12 | This course provides students with a regularly scheduled, supervised employment opportunity related to agriculture occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction about the work experience, consistent with the student's occupational goals, and related to the Agriculture Education program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for student progress assessment and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of $1 / 2$ credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: 01005-Agriculture Education <br> - 5-12 or 9-12 |


 possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14010 | Accounting I | 9-12 | Students in Accounting I will learn the fundamentals of accounting principles that include terminology, accounting cycle, basic concepts, financial statements, roles of accountants, and ethics in accounting. Simulation packets are often integrated into the course. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, 9-12 <br> OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, 9-12 |
| 14011 | Accounting II <br> - Prerequisite: Accounting I | 9-12 | Students in Accounting II 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. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14012 | Accounting III <br> - Prerequisite: Accounting II | 10-12 | Students in Accounting III 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. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14013 | Accounting IV <br> - Prerequisite: Accounting III | 10-12 | Students in Accounting IV 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. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14014 | Forensic Accounting <br> - Prerequisite: Accounting IV | 11-12 | Students in Forensic Accounting, sometimes called investigative accounting, will explore applying accounting concepts and techniques to legal problems. Forensic accountants investigate and document financial fraud and white-collar crimes such as embezzlement. They also provide litigation support to law enforcement agencies investigating financial wrongdoing. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14015 | Entrepreneurial Accounting <br> - Prerequisite: Accounting IV | 11-12 | Students in Entrepreneurial Accounting will examine the principles, techniques, and uses of accounting in the planning, control, and decision-making of business organizations from an entrepreneurial perspective. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14016 | Business Finance <br> - Prerequisite: Accounting I | 9-12 | Students in Business Finance will focus on a business's financial behavior, examine the financial side of running a business, keeping records, investing, protecting against loss, obtaining credit, and making strategic decisions. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, 9-12 OR 03025-CTE Business Education <br> - K-12, 1-12, 5-12, 9-12 |
| 14022 | Web Design <br> - Prerequisite: Keyboarding or equivalent skill | 9-12 | Students in Web Design will be introduced to various ways to create and maintain web pages. Course topics will focus on overall production processes, emphasizing design elements involving layout, navigation, and interactivity. Understanding proper ethics, copyright laws, social networking, and cyber security topics will be integrated. The basic language of web design and software will be taught along with the additional media inputs within a website (e.g., video, animation, sound, scrolling marquees, forms, contacts, and other additional components). | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14024 | Business Computer Applications <br> - Prerequisite: Keyboarding or equivalent skill | 9-12 | Students in Business Computer Applications will continue developing skills in various computer applications and using multiple input and output devices to gather information, design, present, and evaluate projects. The course will include ethical uses of computers and information. The course would be helpful for all students. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14025 | Spreadsheets <br> - Prerequisite: Keyboarding or Business Computer Applications | 9-12 | Students in Spreadsheets will be introduced to spreadsheet software/applications to analyze business trends and solve problems for business and personal use. This course will include designing and using worksheets, writing formulas, analyzing data, charting data, managing data, using pivot charts/tables, creating macros, and displaying information on web pages. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14026 | Database <br> - Prerequisite: Keyboarding or Business Computer Applications | 9-12 | Students in Database will use database software to organize and automate file handling. These files will be used to analyze business trends and solve problems. Students will create tables, queries, forms, reports, templates, and web pages to understand the functionality of a database. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14028 | Communication Technologies | 9-12 | Students in Communication Technologies 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. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14060 | Business Communications <br> - Prerequisite: Keyboarding or equivalent skill | 9-12 | Students in Business Communications will learn to integrate oral and written communication in a clear, courteous, concise, complete, and correct manner on both personal and professional levels. Listening skills, learning styles, and teamwork will be incorporated to give students a solid base to communicate effectively. <br> Note: This course can be taught for Business Education credit only. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 03020-Business Ed/General <br> Business <br> - K-12, 1-12, 5-12, 9-12 OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, 9-12 |
| 14079 | Business Technology and Procedures <br> - Prerequisite: Word processing skill | 10-12 | Students in Business Technology and Procedures will analyze productivity throughout the workforce, which imposes on all workers the need for effective and efficient information management, problem-solving, and communication tasking. This class provides practical office simulations, including information processing systems, job search skills, preparation of business presentations, and other technology procedures. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14090 | Business Law | 9-12 | Students in Business Law will be introduced to the fundamental background of the development and enforcement of laws, the difference between criminal and civil law, and our present court system and how it works. Topics to be discussed include laws concerning contracts, sales, consumers, property, computers, family, environment, wills and trusts, and bankruptcy. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14094 | Keyboarding | 9-12 | Students in Keyboarding will develop skills to operate a keyboard using the touch system and to compose formal and informal documents. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ |  |
| 14095 | Financial Literacy | 9-12 | Students in Financial Literacy will study the impact of financial choices on personal and occupational goals and future earnings potential. Real-world topics include checking accounts, budgeting, saving for large purchases, using credit cards, figuring out interest and fees, being a responsible consumer, earning power, learning about taxes and paycheck withholding, college costs, mortgages, retirement savings, and investments. This course will provide a foundational understanding of making informed personal financial decisions. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14096 | Word Processing <br> - Prerequisite: Keyboarding or equivalent skill | 9-12 | Students in Word Processing will use word processing software to create and edit documents such as business letters, envelopes, labels, flyers, reports, and newsletters. Improved productivity will be developed using time-saving shortcuts, including templates, merging, tables, and key commands. Students will continue to practice formatting, editing, composition, and proofreading. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14098 | Desktop Publishing <br> - Prerequisite: Keyboarding or equivalent skill | 9-12 | Students in Desktop Publishing will use desktop publishing software to create publications such as newsletters, banners, catalogs, brochures, letterheads, business cards, and programs. They will learn design techniques using multimedia integration, formatting skills, page layout, and templates. Students will explain the purposes, functions, and common features of desktop publishing software. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, 9-12 <br> OR <br> 03025-CTE Business Education <br> -K-12, 1-12, 5-12, 9-12 |
| 14099 | Multimedia | 9-12 | Students in Multimedia 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. The topics of image editing, animation, file compression, digital audio/video editing, and planning for multimedia applications will also be discussed. Enhancements include proper format and appropriate use of graphics, animations, and transitions. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14100 | Multimedia II <br> - Prerequisite: Multimedia I | 9-12 | Multimedia II students will continue using digital images and videos to create production and presentations using advanced skills and industry-recognized software. Students will learn advanced skills in image editing, animation, file storage, digital audio/video editing, and planning for multimedia applications in multimedia production, including broadcasting (recorded and live), interactive media, and computer animation. The careers in multimedia and copyright/fair use will also be discussed. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14111 | Entrepreneurship | 9-12 | Students in Entrepreneurship will develop the skills needed to effectively organize, develop, create, and manage their own businesses. Topics covered include entrepreneurial concepts, characteristics of business organizations, business opportunities, entrepreneurial career examples, individual career assessment and planning, and entrepreneurial projects and simulations. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 14151 | Economics (CTE) | 9-12 | Economics is the study of economic principles and their application. This may include types of business ownership, theory of the free enterprise system, general economic principles, the role of the government, cooperative marketing, economic terms and definitions, world conditions, and how they affect the American Free Enterprise Systems. <br> NOTE: This course can only be taught for Career and Technical Education - Business Education credit. Economics (15060) for Social Studies credit can be found under Social Studies. | $1 / 4,1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14230 | Business Fundamentals | 9-12 | Students in Business Fundamentals will be introduced to the business world and prepare for the economic roles of consumers, workers, and citizens. The content may include a study of the business environment and strategies for creating, financing, marketing, and managing a business. This course will also serve as a background for other business courses you may take in high school and college. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, 9-12 OR <br> 03025-CTE Business Education <br> -K-12, 1-12, 5-12, 9-12 |
| 14231 | Management I | 9-12 | Students in Management I are introduced to management and organizational theory. Topics include leadership, motivation, planning, teamwork, and goal setting. The course will develop a mastery of theory and research findings about organizations and people within the organizations. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14232 | Management II <br> - Prerequisite: Management I | 9-12 | Students in Management II will continue the study of management functions and theories. Topics include business organization, personal and management skills, ethics and social responsibility, human resource management, technology, and information management, financial decision-making, industry analysis, markets and prices, and organized labor. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14233 | Global Management <br> - Prerequisite: Management I | 10-12 | Students in Global Management will explore the challenges and risks of entering international business enterprises, including political, legal, and cultural differences. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 14234 | Operations Management <br> - Prerequisite: Management I | 10-12 | Students in Operations Management will gain an understanding of the principles and procedures necessary to manage and operate a business. Topics include staffing decisions, inventory control, financial decision-making, ethical decision-making, and social responsibility. Students will have an opportunity to plan, operate, and manage an event. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14950 | Capstone-Business Education | 11-12 | This course is the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: <br> 03020-Business Ed/General <br> Business <br> -K-12, 1-12, 5-12, 9-12 <br> OR <br> 03025-CTE Business <br> Education <br> - K-12, 1-12, 5-12, 9-12 |

## HIGH SCHOOL BUSINESS EDUCATION COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Business Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14999 | Cooperative Work Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Business Education Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Business Education program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for student progress assessment and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of $1 / 2$ credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, 9-12 OR <br> 03025-CTE Business Education <br> -K-12, 1-12, 5-12, 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


# HIGH SCHOOL CAREER AND TECHNICAL SUPPLEMENTARY SERVICES COURSE CODES GRADES 9-12 

High school (grades 9-12) courses in Career and Technical Supplementary Services require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Grade Level | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 26010 | CTE Resource Education | 9-12 | Career and technical students at risk or members of special population groups who require assistance to succeed in their education programs are eligible for career and technical special needs programming. <br> Students eligible for career and technical resource education must be identified by personnel qualified to complete the required assessment. <br> Services in career and technical education include a) career counseling; b) consultation with career and technical education teachers in making necessary adaptations in content, methods, and equipment; and c) student support in the learning process. | $\begin{gathered} 1 / 2 \text { to } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 26000-CTE Resource Educator <br> - 5-12 |
| 26011 | CTE Resource Education: Service Learning | 9-12 | CTRE/Service Learning is a vital part of the CTRE program. This component will help at-risk students make a smooth, successful transition from high school to the world of work and will allow students to earn elective credit toward graduation requirements. | $1 / 2 \text { to } 2$ <br> Max credit $=2$ |  |
| 28010 | CTE Basic Skills Education | 9-12 | Career and technical students at risk or members of special population groups who require assistance to succeed in their educational programs are eligible for career and technical special needs programming. <br> Students eligible for career and technical education must be identified by personnel qualified to complete the required assessment. <br> Services in career and technical education include a) career counseling; b) consultation with career and technical education teachers in making necessary adaptations in content, methods, and equipment; and c) student support in the learning process. | $\begin{gathered} 1 / 2 \text { to } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 28000-CTE Basic Skills Educator <br> - 5-12 |
| 28011 | CTE Basic Skills Education: Service Learning | 9-12 | CTBS/Service Learning is a vital part of the CTBS program. This component will help at-risk students make a smooth, successful transition from high school to the world of work and will allow students to earn elective credit toward graduation requirements. | $1 / 2 \text { to } 2$ <br> Max credit $=2$ |  |

## HIGH SCHOOL CAREER AND TECHNICAL SUPPLEMENTARY SERVICES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Career and Technical Supplementary Services require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Grade Level | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 29010 | CTE Mentorship Education | 9-12 | Career and technical students at risk or members of special population groups who require assistance to succeed in their educational programs are eligible for career and technical special needs programming. <br> Services in career and technical education include student support in the learning process. | $1 / 2$ to 2 <br> Max credit $=2$ | License Code: 29000-CTE Teacher/Student Mentor <br> - 5-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
${ }^{* *}$ Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

# HIGH SCHOOL CAREER CLUSTERS COURSE CODES <br> GRADES 9-12 

High school (grades 9-12) courses in Career Clusters require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 37020 | Architecture and Construction | 9-12 | The Career Cluster for Architecture and Construction encompasses careers in designing, planning, managing, building, and maintaining the built environment. Career opportunities are available in Design/Pre-Construction, Construction, and Maintenance/Operations pathways. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 37020-CTE Architecture and Construction <br> - 9-12 <br> OR <br> 37021-Provisional/CTE- <br> Architecture and Construction <br> -9-12 |
| 37030 | Arts, A/V Technology and Communications | 9-12 | 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 Broadcasting and Telecommunications Technologies. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 37030-CTE Arts, A/V <br> Technology and Communication <br> -9-12 <br> OR <br> 37031-Provisional/CTE Arts, A/V Technology and Communication <br> -9-12 |
| 37080 | CTE Health Careers | 9-12 | The Career Cluster for Health Careers encompasses planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development. It will introduce health careers through an examination of occupations within the health sciences industry. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 37080-CTE Health Careers <br> - 9-12 <br> OR <br> 37081-Provisional/CTE Health Careers <br> - 9-12 |
| 37140 | Manufacturing | 9-12 | The Career Cluster for Manufacturing encompasses planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance, and manufacturing/process engineering. Career opportunities are available in the pathways of Production; Manufacturing, Production Process Development; Maintenance, Installation and Repair; Quality Assurance; Logistics and inventory control, and Health, Safety, and Environmental Assurance. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 37140-CTE Manufacturing <br> -9-12 <br> OR <br> 37141-Provisional/CTE Manufacturing - 9-12 |

# HIGH SCHOOL CAREER CLUSTERS COURSE CODES <br> GRADES 9-12 

High school (grades 9-12) courses in Career Clusters require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 37170 | Transportation, Distribution, and Logistics | 9-12 | The Career Cluster of Transportation, Distribution, and Logistics encompass planning, management, and movement of people, materials, and goods by road, pipelines, air, rail, and water as related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment, and facility maintenance. Career opportunities are available in the pathways of Transportation Operations, Logistics Planning and Management Services; Warehousing and Distribution Center Operation; Facility and Mobile Equipment Maintenance; Transportation Systems/Infrastructure Planning; Management, and Regulation; Health, Safety, and Environmental Management and Sales and Service. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 37170-CTE Transportation, <br> Distribution, and Logistic <br> -9-12 <br> OR <br> 37171-Provisional/CTE <br> Transportation, Distribution, and Logistics <br> - 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL COMPUTER SCIENCE EDUCATION COURSE CODES

 GRADES 9-12High school (grades 9-12) courses in Computer Science Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23011 | Computer Science Applications | 9-12 | The focus of this course is microcomputer operation system functions and commands. Students learn about operating system concepts, disk, and file formats, disk and file management, and control and processing programs. Students learn to use utilities to sort, merge, copy, back up, and recover data. They also perform the installation and execution of business applications software. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 23012 | Computer Science Programming | 9-12 | Basic programming concepts are presented, which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming, including logic, design, coding, structure, and controls, are addressed. Careers in programming are explored, and students are provided with opportunities to increase their communication, teamwork, and critical thinking skills. Business projects are used to show how programming skills are used in the business world. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 23013 | Integrated Mathematics for Computer <br> Science/Information <br> Technology (Computer Science) <br> - Recommended Prerequisite: Algebra I and Computer Science Programming or Programming Essentials-Visual Basics | 9-12 | This course is computer science with a major focus on math. Course topics are divided into six areas: sets, functions, and relations; basic logic; proof techniques; counting basics; graphs and trees; and discrete probability. Mathematical topics are interwoven with computer science applications to enhance the student's understanding of the introduced mathematics while students develop the ability to see computational problems from a mathematical perspective. Topics also include the study of properties and operations of the real number system, evaluating rational algebraic expressions, solving, and graphing first-degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratic equations. Algorithms in both mathematics and computer science contexts will be explored in depth. <br> Note: This course can be taught for Computer Science credit only. For Career and Technical Education credit, Integrated Mathematics for Computer Science/Information Technology can be found under Information Technology. For Mathematics credit, Integrated Mathematics for Computer Science/Information Technology can be found under Mathematics. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 23000-Computer Science <br> - 5-12 or 9-12 |

## HIGH SCHOOL COMPUTER SCIENCE EDUCATION COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Computer Science Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 23015 | Advanced Computer Science Programming | 10-12 | Advanced Computer Science Programming provides students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text processing. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 23580 | Advanced Placement Computer Science A© | 10-12 | AP Computer Science A is equivalent to a first-semester, collegelevel course in computer science. The course introduces students to computer science with fundamental topics that include problemsolving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem-solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale from small, simple problems to large, complex ones. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 23000-Computer Science <br> - 5-12 or 9-12 |
| 23582 | Advanced Placement Computer Science Principles® | 9-12 | This course focuses on computational thinking, which is vital for success in all disciplines. Students use computational tools to analyze and study data. They also work with large data sets to identify, analyze, and draw conclusions from trends. It also focuses on student creativity and collaboration to develop oral and written communication and problem-solving skills. Students will use software and technology to explore questions that interest them. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


# HIGH SCHOOL DRIVER AND TRAFFIC SAFETY EDUCATION COURSE CODES 

GRADES 9-12
(For time/credit options, refer to the Department of Transportation ND Administrative Code 37-03-04-02 and the
Administrative Resource Guide for Driver and Traffic Safety Education in North Dakota (http://www.dpi.state.nd.us/approve/drivered.shtm)

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21012 | Driver Education Classroom Only | $\begin{gathered} 8 \\ \text { (see note) } \\ 9-12 \end{gathered}$ | The classroom program of driver's education includes at least 30 hours of classroom instruction. This course teaches students to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). <br> (Note: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit.) | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ |  |
| 21013 | Driver Education Behind-the-Wheel Only | 9-12 | The behind-the-wheel instruction should include: 1) a minimum of 6 hours of supervised behind-the-wheel on-street instruction in a dualcontrol vehicle and at least 6 hours of driving observation; or 2) at least three hours of behind-the-wheel on-street instruction and twelve hours of simulation, or 3) at least three hours of behind-the-wheel onstreet instruction in addition to at least six hours of range driving, or 4) a sequential use of simulation, multiple-car driving range, and behind-the-wheel on-street instruction of which students must receive a minimum of two hours of behind-the-wheel instruction onstreet instruction. | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ | License Code: 21005-Driver Education <br> - 5-12 o 9-12 |
| 21014 | Two-Phase Program-Classroom and Behind-the-Wheel | 9-12 | The most frequently offered driver education course is a two-phase program encompassing integrated driver education experiences consisting of 30 hours of classroom instruction and a minimum of 6 hours of supervised behind-the-wheel on-street instruction in a dualcontrol vehicle and at least 6 hours of driving observation. | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ |  |
| 21015 | Three Phase Program-Classroom, Behind-theWheel, \& Simulation | 9-12 | An integrated program of a minimum of 30 hours of classroom instruction combined with at least three hours of behind-the-wheel on-street instruction and twelve hours of simulation. | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ |  |

# HIGH SCHOOL DRIVER AND TRAFFIC SAFETY EDUCATION COURSE CODES 

GRADES 9-12
(For time/credit options, refer to the Department of Transportation ND Administrative Code 37-03-04-02 and the
Administrative Resource Guide for Driver and Traffic Safety Education in North Dakota (http://www.dpi.state.nd.us/approve/drivered.shtm)

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 21016 | Three Phase Program-Classroom, Behind-theWheel, \& Multi-Car Driving Range | 9-12 | An integrated program of a minimum of 30 hours of classroom instruction combined with extensive driving on a multi-car driving range. Students must receive at least three hours of behind-thewheel, on-street instruction and at least six hours of range driving. | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ | License Code: 21005-Driver Education - 5-12 or 9-12 |
| 21018 | Four Phase Program-Classroom, Behind-theWheel, Simulation, \& Multi-Car Driving Range | 9-12 | This course provides a comprehensive driver education program, including a minimum of 30 hours of classroom instruction and sequential use of simulation, multiple-car driving range, and behind-the-wheel on-street instruction. Students must receive a minimum of two hours of behind-the-wheel and on-street instruction. | $1 / 4$ or $1 / 2$ <br> (may be awarded $1 / 2$ credit if all required times are doubled) <br> Max credit $=1 / 2$ |  |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school, earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES
GRADES 9-12
High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05011 | Developmental Reading/Writing | 9-12 | Developmental Reading/Writing allows students to focus on reading and writing skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension and writing skills up to the desired level or to develop strategies to read and write more efficiently. | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: $05020-$ English 5-12 or $9-12$ OR 05007-Reading $5-12,9-12,1-12$, or K-12 |
| 05012 | English Intervention | 9-12 | English Intervention is designed to assist struggling and/or failing students in an English course. This course should be provided in conjunction with the regular English course to pre-teach, re-teach, or provide enrichment to the student to prevent the need to modify the school's existing English curriculum. This course should be a structured class period that will build upon the existing reading, writing, and language skills needed for students to achieve the opportunity for success in their current and/or future English courses. | $1 / 2$ or 1 <br> Max credit $=3$ | License Code: 05020-English - 5-12 or 9-12 |
| 05015 | Remedial Reading | 9-12 | To instruct students in a secondary setting who have failed to benefit from regular classroom instruction in any content subject where reading is a required skill. | Supplemental instruction provided as needed |  |
| 05022 | Grammar | 9-12 | Grammar involves the study of the English language, its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 05024 | History of the English Language | 11-12 | Development of an understanding of the historical and social changes in the English language. How the Anglo-Saxon dialects transplanted to Britain developed over time into English. Attention should center on two historical areas: 1) the influence of nonlinguistic factors such as social and political change, and 2) the effect on English of the process of general language change. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 05030 | Humanities (English) | 10-12 | Humanities (English) provides an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. These courses may also cover the languages and political institutions of these cultures. <br> Note: This course can be taught for English credit only. For Social Studies credit, use Humanities (Social Studies) under Social Studies. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1^{`} \end{gathered}$ | License Code: <br> Any 5-12 or 9-12 <br> - English degree |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05031 | American Literature | 10-12 | American Literature focuses on commonly known American authors and their work. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and understand how the literature reflects the society of the time. Oral discussion is integral to literature courses, and written compositions are often required. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05033 | Modern Literature | 10-12 | Modern Literature has the same aim as general literature courses (to improve students' language arts and critical-thinking skills), focusing on the literature written during or reflecting a particular time period (such as the French Revolution, the 1960s, or the 20th century). Students determine the underlying assumptions and values within the selected works, reflect upon the influence of societal events and social attitudes, and compare the points of view of various authors. Oral discussion is integral to literature courses, and written compositions are often required. | $1 / 4,1 / 2, \text { or } 1$ <br> Max credit $=1$ |  |
| 05034 | English Literature | 10-12 | English Literature may survey British literature or focus on a selected timeframe of England's history. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and understand how the literature reflects the society of the time. Oral discussion is integral to literature courses, and written compositions are often required. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 05035 | World Literature | 10-12 | World Literature uses representative literature selections from ancient and/or modern times from countries worldwide. Students improve their critical-thinking skills as they comprehend the diversity of literary traditions and the influences of those traditions. Oral discussion is integral to literature courses, and written compositions are often required. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 05036 | Biography | 10-12 | Biography is the study of the lives of persons in narrative accounts that have stylistic and other formal qualities of noteworthy literature, historical development of techniques of biographical styles, and methods of revealing the subjects' character as well as the facts of their lives. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ |  |
| 05037 | Drama (Literature) | 9-12 | The main types and styles of dramatic literature including tragedy, comedy, melodrama, social criticism, classical, romantic, realistic, impressionistic, and expressionistic. It may include philosophy or attitude of the dramatist and background on the historical period and the culture of the intended audience. The study of structure, plot, and techniques of character revelation through movement and dialogue rather than narrative. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 05015-Drama -5-12 or 9-12 |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES
GRADES 9-12
High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05038 | Poetry | 10-12 | Poetry is a study and appreciation of the details of poetry, including rhythm, imagery, connotative word values, figures of speech, similes and metaphors, and rhyme. It may include historical background and speculation on the writers' emotions and ideas. It may be studied by type-Ballads, organized by theme-Man, A Victim of Industrialization, or organized in relation to time-Today's Poetry. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 05039 | Fiction | 9-12 | Fiction is the study of short stories and novels, point of view, plot, character, setting, and theme | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit = } 1 \end{gathered}$ |  |
| 05040 | Composition | 9-12 | Composition focuses on students' writing skills and develops their ability to compose different types of papers for various purposes and audiences. This course enables students to explore and practice descriptive, narrative, persuasive, or expositive styles as they write paragraphs, essays, letters, applications, formally documented papers, or technical reports. Although composition may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05041 | Advanced Composition <br> - Recommended Prerequisite: $1 / 2$ credit in Composition | 10-12 | Advanced Composition reinforces the logic and critical-thinking skills that accompany good writing; these courses, which emphasize word choice, usage, and writing mechanics, provide continued and advanced instruction in writing for a variety of purposes and audiences. This course may emphasize college or business preparation; literature study may be offered as an additional component in which students analyze examples of several genres. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ |  |
| 05042 | Creative Writing | 10-12 | Creative Writing allows students to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The course emphasizes writing; however, students may study exemplary representations and authors to appreciate the form and craft fully. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one form (such as poetry or playwriting). | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05043 | Mythology | 9-12 | Mythology identifies the characteristics of a myth and recognizes the close relationship between myths and legends, folk tales, and fairy tales. This course may include how it reflects upon the culture of people who created them, how they explain the natural world and provide meaning to everyday life, how they establish guidelines for living, and how they are reflected in literature, music, and art. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 05071 | English 9 | 9-12 | English 9 builds upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually includes the four aspects of language use: reading, writing, speaking, and listening. Typically, this course introduces and defines various genres of literature, with writing exercises often linked to reading selections. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 05072 | English 10 <br> - Recommended Prerequisite: English 9 | 10-12 | English 10 usually offers a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver their message. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 05020-English - 5-12 or 9-12 |
| 05073 | English 11 <br> - Recommended Prerequisite: English 9 and 10 | 11-12 | English 11 continues to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 05074 | English 12 <br> - Recommended Prerequisite: English 9, 10, and 11 | 11-12 | English 12 blends composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays but may also write one or more major research papers. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05075 | English GED Equivalent | 9-12 | GED Equivalent English is intended for students who earn the required credits for graduation by passing the English GED exam, as allowed by NDCC 15.1-21-02.2 (2) and NDCC 15.1-21-02.3 (2). This course is intended for students that are significantly behind in the required credits in English for graduation. This course can be used as either preparation to take the English GED exam for high school credit, or to award high school credit upon completion of the English GED exam. This course CANNOT be used as preparation for a GED exam for purposes of obtaining a GED certificate. School board approval is required for schools to award credit for this course. | $1 / 4,1 / 2 \text {, or } 1$ $\text { Max credit = } 4$ |  |
| 05076 | Business English | 11-12 | Business English teaches students communication skills-reading, writing, listening, speaking-concentrating on "real-world" applications. This course emphasizes the practical application of communication as a business tool-using technical reports and manuals, business letters, resumes, and applications as examples-rather than emphasizing language arts skills as applied to scholarly and literary materials. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05077 | Advanced English <br> - Recommended Prerequisite: <br> 3 credits in English | 12 | Advanced English teaches critical reading and analysis of literature; advanced techniques of formal written composition; personal writing in various literary forms; and self-designed oral presentations and group discussion techniques. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 05078 | College Learning LabEnglish 12 | 12 | College Learning Lab-English prepares the student for collegiate studies, specifically Freshman English. The student will be engaged in educational experiences regarding effective listening, speaking, writing, and reading. <br> NOTE: This course code is designed to be used exclusively with the Pearson MyFoundationsLab platform through the CREAM programs. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05081 | Journalism | 9-12 | Journalism examines specific topics in journalism and broadcasting other than those already described. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 05082 | Advanced Journalism <br> - Recommended Prerequisite: $1 / 2$ credit in Journalism | 10-12 | An advanced study of journalism procedures including a review of writing, editing, and proofreading; specific writing skills needed for each of the various media and discussion or simulation of the responsibilities of various professional journalists, and techniques and practice in feature and editorial writing. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ | 05025-Journalism <br> - 5-12 or 9-12 |
| 05091 | Speech I | 9-12 | Speech I is an introduction to various oral communication situations: conversation, group discussion, problem-solving, interpersonal communication, nonverbal communication, and public address. Exploration and application of skills such as gathering information, speech planning, speech organization, delivery techniques, listening skills, communication theory, and understanding persuasion. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ | License Code: 05045-Speech - 5-12 or 9-12 |
| 05092 | Speech II <br> - Recommended Prerequisite: <br> $1 / 2$ credit in Speech I | 10-12 | Speech II is a review and refinement of basic oral communication skills in Speech I-05091. Exploration of related activities such as oral interpretation, parliamentary procedure, media, theater arts, and contest speaking. <br> Note: If no other advanced speech courses are taught, this course should include elements of Oral Interpretation 05093, Beginning Debate 05094, and Advanced Debate 05095. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 05045-Speech 5-12 or 9-12 |
| 05093 | Oral Interpretation <br> - Recommended Prerequisite: <br> $1 / 2$ credit in Speech I | 10-12 | Oral Interpretation is the development, study, and practice of delivery techniques, selection of materials, group reading, analysis, and interpretation of prose, poetry, and drama. | $1 / 4$ or $1 / 2$ <br> Max credit $=2$ | License Code: 05045-Speech 5-12 or 9-12 |
| 05094 | Beginning Debate | 9-12 | Beginning Debate involves studying and applying the techniques for investigating two sides of contemporary problems. It addresses the formulation of propositions; analyzing and determining issues; gathering supporting material; constructing cases; developing logical reasoning and critical thinking; techniques of rebuttal and refutation; and extemporaneous delivery skills. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ | License Code: 05045-Speech <br> - 5-12 or 9-12 |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05095 | Advanced Debate <br> - Recommended Prerequisite: $1 / 2$ credit in Beginning Debate | 10-12 | Advanced Debate is an in-depth investigation and analysis of significant contemporary problems; critical thinking; testing facts and evidence; use of logic and reasoning; and delivery techniques and varieties of forensic speaking. | $1 / 4,1 / 2, \text { or } 1$ <br> Max credit $=4$ | License Code: 05045-Speech <br> -5-12 or 9-12 |
| 05096 | Formal Logic | 9-12 | This course covers the basic organizational functions of words and their logical relationships, studied in the context of syllogisms using ordinary human language, giving students a greater capacity to decode the meaning of statements and arguments. Truth and falsity of statements, their validity and soundness will be explored, in addition to identifying logical fallacies. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05098 | Semantics | 11-12 | Semantics is the study of the evaluative process, the ways a person interprets their own language; factual and influential statements; values in nature compared to the two-valued orientation of written or spoken language; verbal abstractions compared to concrete terms; stereotyping and how to avoid it; use of dating; emotive language; and the distinction between any item and its label. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 05045-Speech -5-12 or 9-12 |
| 05099 | Mass Media | 9-12 | Mass Media develops an awareness of mass media's cultural and social impact and artistic features unique to each medium. It addresses mass media's influence on the communication process, electronic media (radio and television), printed media (newspapers and magazines), and film as forms of entertainment and education. | $1 / 4,1 / 2 \text { or } 1$ <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05111 | Applied Communications | 9-12 | Applied Communications allows students to develop and refine communication skills through competency-based individual and group learning in job-related communication skills: reading, writing, listening, speaking, problem-solving, visual, and nonverbal communication. These communication skills will be applied to occupations in agriculture, business/marketing, health occupations, home economics, and technical/trade/industry. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |

HIGH SCHOOL ENGLISH/LANGUAGE ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in English/Language Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 05580 | Advanced Placement English Language \& Composition® | 10-12 | The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Students develop a personal style throughout the course by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05581 | Advanced Placement English Literature and Composition© | 10-12 | The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of how writers use language to provide meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |
| 05582 | AP Seminar: English | 10 | Following the College Board's suggested curriculum designed to parallel college-level English courses, AP Seminar: English courses expose students to a variety of texts covering multiple genres, topics, and rhetorical contexts in a seminar-style setting. These courses foster students' ability to summarize and explain the salient ideas in a text by analyzing an author's perspective, rhetorical choices, and argumentative structure. Students evaluate a variety of literary, informational, and visual texts, and synthesize perspectives to develop evidence-based arguments. Students convey their findings through multiple written formats, multimedia presentations, and oral defenses. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 05020-English - 5-12 or 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school, earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB). Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09022 | Family and Consumer Sciences I | 9-12 | To introduce students to basic concepts in all Family and Consumer Sciences areas. This course may include: availability of personal resources**; organization of resources to provide for needs; making consumer decisions; creation of personal living environment; developing satisfying interpersonal relationships; understanding and caring for children; meeting personal nutritional needs; managing food resources; maintaining good health; clothing and textile selection, care, and construction; contributing to satisfying and family life; career orientation and occupational information; work readiness skills; leadership development. <br> *The $1 / 4$ credit option should be used only when this course is part of a rotation of courses designed to introduce students to new course options. <br> **This course may include personal finance concepts such as checkbook mechanics, saving for larger purchases, credit, earning power, taxation and paycheck withholdings, college costs, making and living within a budget, mortgages, retirement savings, and investments. | $\begin{gathered} 1 / 4^{*}, 1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 09025-Home Economics <br> - 5-12 or 9-12 OR 09035-CTE Family \& Consumer Sciences |
| 09023 | Family and Consumer Sciences II <br> - Prerequisite Family and Consumer Sciences I | 10-12 | To provide students with experiences in all areas of Family and Consumer Sciences at a more advanced level than in Family and Consumer Sciences I. The course may include self-development; multiple roles of individuals in contemporary society; finances and economic interdependence**; housing to meet lifestyle and family goals; lifestyle and parenting decisions; family meal choices at home and away; influences of nutrition on health and disease; personal and family clothing needs; societal and environmental impacts of personal decisions; career information, exploration, and planning; work readiness skills; leadership development. <br> **This course may include personal finance concepts such as checkbook mechanics, saving for larger purchases, credit, earning power, taxation and paycheck withholdings, college costs, making and living within a budget, mortgages, retirement savings, and investments. | $1 / 2$ or 1 <br> Max credit $=1$ | 09040-Family \& Consumer Science - 5-12 or 9-12 |

## HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.


HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09026 | Child Development | 9-12 | To increase students' knowledge of how children grow and develop and to foster acquisition of skills that promote healthy development of the individual. Content may include processes in individual development, cultural and ethnic differences, and similarities in childcare, how children learn, age-appropriate activities for children, family development and preparation for parenthood, prenatal development, changing relationships within the family, current issues relating to children and families, sources of support and assistance, related careers, and leadership development. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 09025-Home Economics <br> - 5-12 or 9-12 OR <br>  <br> Consumer Sciences <br> - 5-12 or 9-12 <br> OR <br> 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |
| 09027 | Clothing and Textiles I | 9-12 | This course introduces students to basic consumer skills regarding fabric, design, construction, and maintenance techniques. Instruction may include cost analysis, wardrobe planning, basic sewing and fiber terminology, hand and/or machine sewing equipment, reading, and using a pattern, and care and maintenance of fabrics and garments. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 09028 | Consumer and Resource Management | 9-12 | To help students learn how to make intelligent choices in using resources to gain maximum personal and family satisfaction. Course content may include: interrelationships between the individual and the economy**; consumer behavior; consumer rights and responsibilities; evaluating consumer information; financial services; resource management techniques; consumer credit; developing financial plans to meet personal and family goals; financial security; societal and environmental impacts of decisions; current issues relating to consumerism and resource management; sources of consumer support and assistance; related careers; leadership development. <br> **This course may include personal finance concepts such as checkbook mechanics, saving for larger purchases, credit, earning power, taxation and paycheck withholdings, college costs, making and living within a budget, mortgages, retirement savings, and investments. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ |  |
| 09029 | Clothing and Textiles II | 9-12 | This course provides students with knowledge and skills to identify and incorporate design details in garments or environmental textiles, assess and upgrade commercially produced patterns or products, and perform basic repairs and/or alterations. Lab experiences may include design and/or construction of one or more projects related to the concepts taught. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09030 | Fashion and Textile Trends | 9-12 | This project-oriented course introduces students to historical, current, and futuristic aspects of the fashion industry, including color and design principles, identifying fashions and fads, merchandising, apparel and environmental product production, entrepreneurship, and careers in the fashion industry. This course reinforces science, mathematics, management, communication skills, and teamwork. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 09037 | Current Topics in Textiles and Apparel | 9-12 | Students will explore areas of interest related to apparel, textiles, and home furnishings. Students may expand their interest and/or expertise in a clothing or textiles area to explore a topic in greater detail or to develop more advanced skills. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 09025-Home Economics |
| 09041 | Teaching Professional (CTE) | 9-12 | Teaching Professional (CTE) courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in education. | $1 / 2$ or 1 <br> Max credit $=2$ | - 5-12 or 9-12 OR <br> 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |
| 09042 | Educational Methodology | 9-12 | Educational Methodology (CTE) courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their teaching objectives, design lesson plans, and experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management, and planning strategies, presentations and questioning skills, classroom management, and evaluation techniques. | $1 / 2$ or 1 <br> Max credit $=2$ |  |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09129 | Individual and Family Health | 9-12 | To help students develop a holistic approach to "good health" and learn ways to maintain optimum levels of wellness. Course content may include: characteristics of a healthy person; maintenance of health (including nutrition, physical fitness, personal hygiene, accident prevention, protection against disease, effects of alcohol, tobacco, and other drugs, coping skills, "preventive maintenance", home safety and sanitation, athletics); preparing for emergencies; home care of the sick; pregnancy, community health services, and programs; selecting and using health care products and services; current issues related to personal, family, and world health; related careers; leadership development. <br> Note: This course can be taught for CTE credit only. Health can be found under Physical Education and Health for Physical Education credit. For Science credit, Health can be found under Science. This course may also satisfy the health requirement for graduation. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 09025-Home Economics |
| 09130 | Parenting | 9-12* | To explore the parenting roles that most adults will assume at some time during their lives. Content may include: assessing readiness for parenthood; role clarification-mothers, fathers, and others; the finances of parenting; providing an environment for optimum child growth and development; family communication; stress and crisis in the family; special parenting situations finding and assessing child care, the handicapped child, foster parenting, blended families, single-parent families, parenting as grandparents; current issues impacting on parents, children, and society; sources of support and assistance for parents and families; related careers; leadership development. <br> */t is recommended that enrollment of students below grade 10 be limited to those with an immediate need, such as pregnant or parenting teens. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | - 5-12 or 9-12 OR 09035-CTE Family \& Consumer Sciences <br> - 5-12 or 9-12 <br> OR <br> 09040-Family \& Consumer Science <br> -5-12 or 9-12 |
| 09131 | Nutrition and Food Preparation I | 9-12 | This introductory course will prepare students to make critical decisions about food that will contribute to the health and wellbeing of themselves, their families, and their communities. The course may 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 apply them to their eating habits and dietary needs. Lab experiences will focus on preparing and tasting a variety of foods. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09135 | Nutrition and Food Preparation II | 9-12 | This course will examine the individual's nutritional needs, emphasizing the relationship between diet to health. Enhanced cooking terms and techniques, kitchen and meal management, time and resource management, and food preparation techniques will be explored. This course may include food trends and lifestyle options such as organic foods, vegetarian diets, convenience foods, eating out, lactose and gluten intolerance, and nutrition supplements. Lab experiences will align with and enhance the course content using a variety of foods and preparation methods. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 09136 | Cultures and Cuisine | 9-12 | This course will explore cultures in various parts of the world about ethnic foods, food supply, preparation methods, and traditions. Current, historical, and futurist issues related to food patterns and the global society will be an integral component of the course, including famine, contamination, religious rites and practices, celebrations, and cultural cuisine. Labs will combine the familiar with the exotic to create foods of the world | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 09025-Home Economics <br>  |
| 09137 | Nutrition and Fitness | 9-12 | This course is designed for all students concerned about nutrition and fitness. It will explore topics such as sports nutrition in relation to performance, decision-making, personal goal-setting, and stress management in relation to personal needs. Meal planning, fast foods, restaurant dining, family practices, genetically altered foods, weight loss and gain, and current nutrition guidelines may be components of this course. Students will learn to read and interpret labels in relation to their dietary needs. Personal wellness and a healthy lifestyle will be the basis for lab experiences. | $1 / 2$ or 1 <br> Max credit $=1$ | - 5-12 or 9-12 OR <br> 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |
| 09138 | Food Science and Technology | 9-12 | This course will examine food and the food industry along the producer-to-table continuum. Topics may include production, processing, preparation, preservation, and packaging principles. This course may integrate the application of basic food science principles, government regulations, emerging trends, sustainability, biotechnology, packaging and marketing, transportation and distribution, and career opportunities related to food science and technology. Lab experiences can demonstrate how food technology affects the consumer. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09132 | Family Living (CTE) | 9-12 | To assist students in preparing for adult roles that support and strengthen family life. The course may include lifestyle and role options for adult life; forms and functions of the family; processes in making and evaluating decisions; readiness for adult roles and responsibilities, including marriage and parenthood; customs and laws relating to marriage and family life; emergency preparedness; coping with crises affecting family life; the family throughout the life cycle; interactions between family and community; sources of support and assistance for individuals and families; current issues related to home and family life; related careers; leadership development. <br> Note: This course can be taught for CTE credit only. For Physical Education credit, Family Living can be found under Physical Education and Health. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 09133 | Housing and Living Environments | 9-12 | To explore the impacts housing has on families and the variety of ways individuals and families meet their needs for shelter. Content may include: the meaning of home; determining personal housing needs; selecting housing to meet needs; legal and financial aspects of housing; housing for individuals with special needs; the home as work site; personal expression through home decoration; household equipment selection, care, and use; maintaining a safe environment; home repairs and improvements; energy and resource consumption and conservation; technology for home and family life; societal and environmental impacts of decisions; sources of support and assistance for individuals and families; current issues related to family housing; related careers; leadership development. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 09025-Home Economics <br> - 5-12 or 9-12 <br> OR <br>  <br> Consumer Sciences <br> - 5-12 or 9-12 <br> OR <br> 09040-Family \& Consumer <br> Science <br> - 5-12 or 9-12 |
| 09140 | Individual Family and Consumer Sciences Studies | 9-12 | To provide students in Family and Consumer Sciences additional opportunities to expand their knowledge and explore the fields of home and family life, related careers, leadership, citizenship, and personal development on an individual basis. Instructor and student will cooperatively develop specific goals and learning activities to achieve these goals. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ |  |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/Credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09211 | Early Childhood Care and Education Services | 10-12 | To prepare the student for employment in childcare centers under the supervision of a director or for self-employment in home-based childcare. Content may include opportunities in childcare occupations; career maturity skills; childcare facilities; stages of child growth and development; planning for children's needs; protecting the child's health and safety; children with special needs; working with parents; working with other childcare related agencies; current issues in childcare; community work experience and/or laboratory simulation; balancing work and family; leadership development. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 09025-Home Economics <br> - 5-12 or 9-12 OR 09035-CTE Family \& Consumer Sciences <br> - 5-12 or 9-12 <br> OR <br> 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |
| 09212 | Clothing and Textile Services | 11-12 | To prepare the student for employment in occupations concerned with the design, manufacture, or care of clothing and other textiles. Content may include opportunities in clothing and textile occupations; career maturity skills; equipment and facilities; developing skills in construction and use of equipment; visual design; color; textile characteristics and implications for use; safety; working with customers; financial management; current issues in clothing and textiles; community work experience and/or laboratory simulation; balancing work and family; leadership development. | 1 or 2 <br> Max credit $=2$ |  |
| 09213 | Food Service/ Culinary Arts | 10-12 | To prepare students for occupations concerned with the preparation and service of food. Content may include opportunities in the food service industry; career maturity skills; legislation affecting the industry and its workers; safety and sanitation; organization of food preparation and service areas; developing skills in quantity food preparation; menu planning and recipe selection; food purchasing; financial management; current issues in food service; community work experience and/or laboratory simulation; balancing work and family; leadership development. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 09214 | ProStart I | 10-12 | ProStart I provides an opportunity for students interested in food to learn about culinary skills and enter the culinary/food service industry by introducing students to the world of professional cooking. Training in safety and sanitation (ServSafe), kitchen basics, food service equipment, nutrition, cost control, accounting, marketing, and customer service relations are taught. Lab experiences will be provided throughout to reinforce these skills. The ProStart Program is a two-year, industry-based program approved by the National Restaurant Association. | 1 or 2 <br> Max credit $=2$ | License Code: 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |

HIGH SCHOOL FAMILY AND CONSUMER SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Family and Consumer Science require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09215 | ProStart II | 10-12 | ProStart II provides a further opportunity for students interested in food to learn about culinary skills and enter the culinary/food service industry by introducing students to the world of professional cooking. Training continues in safety and sanitation (ServSafe), kitchen basics, food service equipment, nutrition, cost control, accounting, marketing, and customer service relations are taught. Lab experiences will be provided throughout to reinforce these skills. The ProStart Program is a two-year, industry-based program approved by the National Restaurant Association. | 1 or 2 <br> Max credit $=2$ | License Code: 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |
| 09250 | Occupational Exploration | 10-12 | To allow students with special needs to develop basic employability skills and explore several occupational clusters in preparation for moving into a more specific training program. Course content may include opportunities in Family and Consumer Sciences occupations; career maturity skills; employability assessment; career exploration and job shadowing; leadership development. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 09299 | Cooperative Work Experience | $\begin{gathered} 11-12 \\ \text { (see note) } \end{gathered}$ | Provides students with a regularly scheduled, supervised employment opportunity related to Family and Consumer Sciences Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Family and Consumer Sciences program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessment of student progress and on-site visits by the instructor during the student's placement. <br> Note: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of 1 credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: <br> 09025-Home Economics <br> - 5-12 or 9-12 <br> OR <br>  <br> Consumer Sciences <br> - 5-12 or 9-12 <br> OR <br> 09040-Family \& Consumer Science <br> - 5-12 or 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART |  |  |  |  |  |
| 02011 | Art History | 9-12 | Art History introduces students to significant works of art, artists, and movements that have shaped the art world and influenced or reflected periods of history. This course often emphasizes the evolution of art forms, techniques, symbols, and themes. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ | License Code: 02005-Art <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 02020 | Art | 9-12 | Art focuses on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on). Still, some courses may focus on only one medium. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 02021 | Fundamental of Art | 9-12 | Fundamental of Art provides students with the knowledge and opportunity to explore an art form and to create individual works of art. This course may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover a particular art form's language, materials, processes, and design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their artistic styles. Although this course focuses on the creation, it may also include studying major artists, art movements, and styles. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 02022 | Color \& Design | 9-12 | Color harmony combinations, design elements from line, geometric form construction, and theories of balance, both symmetrical and asymmetrical. Styles of design patterns for various culturesAmerican Indian, Oriental, and other ethnic groups-should be included. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ |  |
| 02024 | Crafts | 9-12 | Crafts focus is on crafts. This course may survey a wide range of crafts or focus on only one type of craft; possibilities include calligraphy, quilting, silk-screening, cake-decorating, tole-painting, mask-making, knitting, crocheting, papermaking, and so on. | $1 / 4,1 / 2 \text {, or } 1$ $\text { Max credit = } 1$ |  |
| 02025 | Drawing | 9-12 | Drawing focuses on drawing. In keeping with this attention on twodimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on). Still, some courses may focus on only one medium. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 02026 | Painting | 9-12 | Painting focuses on painting. In keeping with this attention on twodimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on). Still, some courses may focus on only one medium. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

July 22, 2022

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART (Continued) |  |  |  |  |  |
| 02028 | Printmaking | 9-12 | Printmaking introduces students to a variety of printmaking techniques using processes such as relief printing (monoprint, collagraph block), intaglio (etching and engraving), and perigraphy (silkscreen films, stencils, block-out). This course emphasizes design elements and principles and introduces art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ |  |
| 02029 | Sculpture | 9-12 | Sculpture focuses on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ |  |
| 02050 | Commercial Art | 9-12 | Commercial Art teaches students to use artistic techniques to effectively communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste-up, and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage, and computer graphics. <br> Note: This course can only be taught for Fine and Performing Arts credit. For CTE credit, Graphic Communication can be found under Trade and Industrial Education. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 02060 | Photography | 9-12 | Photography exposes students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their artistic style. This course may also cover significant photographers, art movements, and styles. <br> Note: This course can only be taught for Fine and Performing Arts credit. For CTE credit, Photography can be found under Trade and Industrial Education. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ |  |

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART (Continued) |  |  |  |  |  |
| 02580 | Advanced Placement Art History© | 10-12 | Functions and effects of art are the focus of the AP Art History course. Students consider influential forces like patronage, politics, class, belief, gender, and ethnicity in their analyses of art forms. They examine styles, techniques, themes, and chronology, comparing and contrasting art forms from varied perspectives. Students explore a specific set of 250 works of art in 10 content areas, beginning with art from global prehistory and ending with global works from the present. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 02581 | Advanced Placement Studio Art: Drawing© | 10-12 | The AP Program offers three studio art courses and portfolios: Two-Dimensional Design, Three-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios corresponding to the most common college foundation courses: 2D Design, 3-D Design, and Drawing. Students may submit any or all the Drawings, Two-Dimensional Designs, or Three-Dimensional design portfolios. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 02582 | Advanced Placement Studio Art: 2-D Design© | 10-12 | The AP Program offers three studio art courses and portfolios: Two-Dimensional Design, Three-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios corresponding to the most common college foundation courses: 2D Design, 3-D Design, and Drawing. Students may submit any or all the Drawings, Two-Dimensional Designs, or Three-Dimensional design portfolios. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART (Continued) |  |  |  |  |  |
| 02583 | Advanced Placement Studio Art: 3-D Design© | 10-12 | The AP Program offers three studio art courses and portfolios: Two-Dimensional Design, Three-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolios corresponding to the most common college foundation courses: 2D Design, 3-D Design, and Drawing. Students may submit any or all the Drawings, Two-Dimensional Designs, or Three-Dimensional design portfolios. AP Studio Art students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 05069 | Introduction to Film Studies I <br> - Recommended Prerequisite: English 9 | 10-12 | Introduction to Film Studies is an introductory course in cinematography and screenwriting. Students will learn various technical vocabulary related to cinema, such as the different types of camera angles and shots, as well as vocabulary necessary for critiquing and appreciating film as a work of art. Students will spend the semester learning how to critique a film while learning about the various film movements that have shaped the way movies are produced and enjoyed around the world. Students will survey multiple film types, ranging from silent films to foreign films and classics. By the end of the semester, students will be able to discuss the value of a film, its cultural importance, and relevance, appreciate a wide variety of styles; and learn about the historical significance of the film industry worldwide. | $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 05070 | Introduction to Film Studies II <br> - Recommended Prerequisite: English 9 \& Intro to Film Studies I | 10-12 | This course will build on the context and skills acquired in Introduction to Film Studies; students will be able to dive even deeper into the world of cinematography and screenwriting. Students will focus on films from the most innovative and radical movements in film history. Students will also do an independent film project where they will select from a list of approved films to do an independent project outside of the watchlist for class. Students will learn basic screenwriting skills. The semester culminates with a group project wherein the group must write and shoot a 5-minute short film. | $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART (Continued) |  |  |  |  |  |
| 08055 | Dance I (Fine Arts) | 9-12 | Dance I (Fine Arts) provides students with experience in one or several dance forms (i.e., modern, jazz, ballet, and tap). Initial classes are usually introductory, while the more advanced courses concentrate on improving students' technique and may offer or require experience in choreography and dance evaluation. <br> Note: This course can only be taught for Fine and Performing Arts credit. For Physical Education credit, use Dance I (Phy. Ed.) under Physical Education and Health. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ | License Code: <br> 08020-Health, Physical Education \& Recreation <br> -K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 08025-Physical Education <br> -K-8, K-12, 1-8, 1-12, 5-12, |
| 08056 | Dance II (Fine Arts) | 10-12 | Dance II (Fine Arts) allows students with prior dance experience to improve techniques, experience choreography, and emphasize performance. <br> Note: This course can only be taught for Fine and Performing Arts credit. For Physical Education credit, use Dance II (Phy. Ed.) under Physical Education and Health. | $1 / 4,1 / 2$, or 1 <br> Max credit $=3$ | or 9-12 <br> OR <br> 08027-Health \& Physical Education <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| MUSIC |  |  |  |  |  |
| 12020 | Music History and Appreciation | 9-12 | Music History and Appreciation surveys different musical styles and periods to increase students' enjoyment of musical styles and/or develop their artistic or technical judgment. Music History and Appreciation may also focus on developing an understanding of a particular style or period. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 12005-Instrumental Music <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 12010- Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 OR <br> 12015-Vocal Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 12030 | Music Theory | 9-12 | Music Theory provides students with an understanding of the fundamentals of music and includes one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 12039 | Supervised Individual Study: Musicology | 9-12 | Supervised Individual Study: Musicology courses, often conducted with instructors, professional musicians, or voice coaches as mentors, enable students to explore music-related topics. Individual Study may serve as an opportunity for students to expand their expertise in a particular form or style, explore a topic in greater detail, or develop more advanced skills. | $1 / 2$ or 1 <br> Max credit $=3$ |  |
| 12040 | Vocal Music (Chorus) | 9-12 | Vocal Music (chorus) provides the opportunity to sing various choral literature styles for men's and/or women's voices and is designed to develop vocal techniques and the ability to sing parts. | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: 12010-Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 OR <br> 12015-Vocal Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| July 22, 2022 |  |  |  |  | $5 \\| P \mathrm{ag} \mathrm{e}$ |

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12048 | Voice Classes | 9-12 | Vocal classes provide instruction in and encourage the development of vocal techniques (including aural development) other than the ability to sing in groups. This course may be conducted on either an individual or small group basis. | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: 12010-Music <br> -K-8, K-12, 1-8, 1-12, 5-12, or |
| 12049 | Supervised Individual Study: Vocal Music | 9-12 | Supervised Individual Study: Vocal Music provides instruction in and encourages the development of vocal techniques (including aural development) other than the ability to sing in groups. This course may be conducted on either an individual or small group basis. | $1 / 2$ or 1 <br> Max credit $=4$ | OR <br> 12015-Vocal Music <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 12051 | Instrumental Music (Band) | 9-12 | Instrumental Music (Band) develops students' technique for playing brass, woodwind, and percussion instruments and covers a variety of non-specified band literature styles (concert, marching, orchestral, and modern styles). | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: <br> 12005-Instrumental Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 12052 | Instrumental Music (Orchestra) | 9-12 | Instrumental Music (Orchestra) is designed to develop students' abilities to play brass, woodwind, percussion, and string instruments, covering a variety of string and orchestral literature styles. | $1 / 2$ or 1 <br> Max credit $=4$ | OR <br> 12010-Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| MUSIC - continued |  |  |  |  |  |
| 12057 | Strings | 9-12 | The study, rehearsing, and performance of music for string instruments. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ | License Code: <br> 12005-Instrumental Music <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 12010-Music <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 12058 | Instrument Classes | 9-12 | Instrumental classes provide individuals with instruction in instrumental techniques. This course may be conducted on either an individual or small group basis. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 12059 | Supervised Individual Study: Instrumental Music | 9-12 | Supervised Individual Study: Instrumental Music provides individuals with instruction in instrumental techniques. This course may be conducted on either an individual or small group basis. | $1 / 2$ or 1 <br> Max credit $=4$ |  |

FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| THEATRE ARTS |  |  |  |  |  |
| 12580 | Advanced Placement Music Theory© | 10-12 | The AP Music Theory course corresponds to one or two semesters of an introductory-level college music theory course, covering topics such as musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are considered essential parts of the course. Students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard or presented in a score. The development of aural skills is a primary objective. Performance is also a part of the curriculum through sight singing. Students understand basic concepts and terminology by listening to and performing various music. Notational skills, speed, and fluency are also emphasized. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 12005-Instrumental Music <br> - K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 12010- Music <br> - K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 12015-Vocal Music <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 05061 | Theatre Arts | 9-12 | Theatre Arts is the awareness and application of the various skills and aspects of theatre productions, including movement, characterization, makeup, costuming, theatre history, set design, lighting, and the directing and analysis of scenes and plays. <br> Note: This course can only be taught for Fine and Performing Arts credit. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=4$ | License Code: 05015-Drama <br> - K-8, 1-8, 5-12, or 9-12 |
| 05063 | Advanced Theatre Arts <br> - Recommended Prerequisite: $1 / 2$ credit in Theatre Art | 9-12 | Advanced Theatre Arts is a more detailed study of theatre productions, including movement, characterization, makeup, costuming, theatre history, set design, lighting, and the directing and analysis of scenes and plays. It may include the production of a full-length play. <br> Note: This course can only be taught for Fine and Performing Arts credit. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=3$ |  |

## FINE AND PERFORMING ARTS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Fine and Performing Arts require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| THEATRE ARTS (Continued) |  |  |  |  |  |
| 05064 | Drama - Literature (Fine Arts) | 9-12 | The main types and styles of dramatic literature include tragedy, comedy, melodrama, social criticism, classical, romantic, realistic, impressionistic, and expressionistic. It may consist of the philosophy or attitude of the dramatist and background on the historical period and the culture of the intended audience. The study of structure, plot, and techniques of character revelation through movement and dialogue rather than narrative. <br> Note: This course can only be taught for Fine and Performing Arts credit. For English credit, use Drama (Literature) under English/Language Arts. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 05015-Drama <br> -K-8, 1-8, 5-12, or 9-12 |
| 05068 | TV/Cinema Production (Fine Arts) | 9-12 | Students will learn (a) the skills necessary to produce the school's television show, along with mini films through CS6-generated art, stop motion, animation, and video production; (b) to use digital and video cameras, video editing software, and CS6 programs including Photoshop and Premiere; (c) to demonstrate a professional attitude and the ability to work independently and in groups. <br> Note: This course can only be taught for Fine and Performing Arts credit. For English credit, use Drama (Literature) under English/Language Arts. | $1 / 4,1 / 2$, or 1 <br> Max credit $=4$ | License Code: 02005-Art <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AMERICAN SIGN LANGUAGE |  |  |  |  |  |
| 06315 | American Sign Language I | 8 <br> (See note) <br> 9-12 | Designed to introduce students to American Sign Language and culture. Learners in level I would operate in the Novice LowPerformance Indicators of the North Dakota Indigenous and World language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators in Communication by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c <br> Note: This course code should only be used for MIS03 reporting purposes when a grade 8 student receives high school credit.) | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 06040-American Sign Language <br> - K-12 |
| 06316 | American Sign Language II | 9-12 | American Sign Language II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice HighPerformance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06317 | American Sign Language III | 9-12 | American Sign Language III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06318 | American Sign Language IV | 9-12 | American Sign Language IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| CHINESE |  |  |  |  |  |
| 06261 | Chinese I | $\begin{gathered} 8 \\ \text { (See note) } \\ 9-12 \end{gathered}$ | Chinese I introduces students to the Chinese language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 06260-Chinese -K-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.


## This course must meet or exceed the following North Dakota

Indigenous and World Languages Content Standards:

- 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM
- 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a
- 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b
- 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b
- 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c
(Note: This course code should only be used for MIS03 reporting purposes when a grade 8 student receives high school credit.)
Chinese II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course.

This course must meet or exceed the following North Dakota
$1 / 2$ or 1
Indigenous and World Languages Content Standards:

- 1.1.NH; 1.2.NH; 1.3.NH

Max credit $=1$
2.1.N.a, 2.1.n.b, 2.1.N.c, 2.2.N.a

- 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b
- 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b
- 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c

Chinese III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards.
Learners in level III progress towards Intermediate Low Proficiency within the Communication goal.

This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards:

- 1.1.IL; 1.2.IL; 1.3.IL
- 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b
- 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b
- 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b
- 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c


## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06264 | Chinese IV | 9-12 | Chinese IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| CHINESE (Continued) |  |  |  |  |  |
| 06587 | Advanced Placement Chinese Language and Culture | 10-12 | Designed by the College Board, this course builds on previous levels. Learners in this course typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in AP progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.AL; 1.2.AL; 1.3.AL <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06260-Chinese <br> -K-12 |
| FRENCH |  |  |  |  |  |
| 06281 | French I | 8 <br> (See note) $9-12$ | French I introduces students to the French language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06010-French <br> - K-8, K-12, 1-8, 1-12, 5-8, 5-12, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c <br> (Note: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit.) |  |
| :---: | :---: | :---: | :---: | :---: |
| 06282 | French II | 9-12 | French II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |
| 06283 | French III | 9-12 | French III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| FRENCH (Continued) |  |  |  |  |  |
| 06284 | French IV | 9-12 | French IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 06285 | French V | 9-12 | French V builds upon skills developed in level IV. Learners in level V typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level V progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IH; 1.2.IH; 1.3.IH <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06010-French <br> - K-8, K-12, 1-8, 1-12, 5-8, $5-12$, or 9-12 |
| 06580 | Advanced Placement French Language and Culture© | 10-12 | Designed by the College Board, this course builds on previous levels. Learners in this course typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in AP progress towards Advanced Low Proficiency within the Communication goal. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES <br> GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.AL; 1.2.AL; 1.3.AL <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GERMAN |  |  |  |  |  |
| 06291 | German I | $\begin{gathered} 8 \\ \text { (See note) } \\ 9-12 \end{gathered}$ | German I introduces students to the German language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. <br> Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c <br> (Note: This course code should only be used for MIS03 reporting purposes when a grade 8 student receives high school credit.) | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06015-German <br> - K-8, K-12, 1-8, 1-12, 5-8, $5-12$, or 9-12 |
| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| GERMAN (Continued) |  |  |  |  |  |
| 06292 | German II | 9-12 | German II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06015-German <br> - K-8, K-12, 1-8, 1-12, 5-8, $5-12$, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

 GRADES 9-12High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c |  |
| :---: | :---: | :---: | :---: | :---: |
| 06293 | German III | 9-12 | German III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.І.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |
| 06294 | German IV | 9-12 | German IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |
| 06295 | German V | 9-12 | German V builds upon skills developed in level IV. Learners in level V typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | level V progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IH; 1.2.IH; 1.3.IH <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c |  |
| :---: | :---: | :---: | :---: | :---: |
| 06586 | Advanced <br> Placement German <br> Language and Culture® | 10-12 | Designed by the College Board, this course builds on previous levels. Learners in this course typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in AP progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.AL; 1.2.AL; 1.3.AL <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |


| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GREEK |  |  |  |  |  |
| 06221 | Greek I | 8 <br> (See note) <br> 9-12 | Greek I introduces students to the Greek language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06020-Greek <br> - K-12, 1-12, 5-12, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | (Note: This course code should only be used for MIS03 reporting purposes when a grade 8 student receives high school credit.) <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06222 | Greek II | 9-12 | Greek II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; <br> 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| JAPANESE |  |  |  |  |  |
| 06231 | Japanese I | 9-12 | Japanese I introduces students to the Japanese language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06230-Japanese -K-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06232 | Japanese II | 9-12 | Japanese II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice HighPerformance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| JAPANESE (Continued) |  |  |  |  |  |
| 06588 | Advanced Placement Japanese Language and Culture | 10-12 | Designed by the College Board, this course builds on previous levels. Learners in this course typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in AP progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.AL; 1.2.AL; 1.3.AL <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06230-Japanese -K-12 |
| LATIN |  |  |  |  |  |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06151 | Latin I | $\begin{gathered} 8 \\ \text { (See note) } \\ 9-12 \end{gathered}$ | Designed to introduce students to the Latin language and culture. Learners in level I would be operating in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c <br> (Note: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit.) | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 06152 | Latin II | 9-12 | Latin II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |
| 06153 | Latin III | 9-12 | Latin III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |

License Code: 06025-Latin

- K-8, K-12, 1-8, 1-12,
$5-8,5-12$, or $9-12$


## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

 GRADES 9-12High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.


## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| INDIGENOUS LANGUAGES |  |  |  |  |  |
| 06811 | Indigenous Languages I | 9-12 | Indigenous Languages I introduces students to Indigenous language and cultures. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners learn to identify the medicinal qualities of plants and trees. They learn the cultural knowledge and relationships between stars and the universe. Learners expand their knowledge of cultural traditions through visits to sacred sites. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: |
| 06812 | Indigenous Languages II | 9-12 | Indigenous Languages II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners continue to learn to identify the medicinal qualities of plants and trees. They expand their cultural knowledge and relationships between stars and the universe. Learners continue to expand their knowledge of cultural traditions through visits to sacred sites. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $1 / 2$ or 1 <br> Max credit $=1$ | 15046-Native American Studies <br> -K-12, 1-12, 5-12, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06813 | Indigenous Languages III | 9-12 | Indigenous Languages III builds upon skills developed in level II. Learners in level III progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners continue to learn to identify the medicinal qualities of plants and trees. They continue expanding their cultural knowledge and relationships between stars and the universe. Learners continue to expand their knowledge of cultural traditions through visits to sacred sites. Within the Communications goal, learners in level III progress towards Intermediate Low Proficiency. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06814 | Indigenous Languages IV | 9-12 | Indigenous Languages IV builds upon skills developed in level III. Learners in level IV progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners continue to learn to identify the medicinal qualities of plants and trees. They continue expanding their cultural knowledge and relationships between stars and the universe. Learners continue to expand their knowledge of cultural traditions through visits to sacred sites. Within the Communications goal, learners in level IV progress towards Intermediate Mid Proficiency. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| OTHER |  |  |  |  |  |

August 3, 2023

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06271 | Other Language I | 9-12 | This code will be used for students transferring into the State of North Dakota with preexisting world language credits that are not currently mapped or aligned to the existing course codes. For the transcript, please name the specific world language for which credit is given (i.e., Swedish I). Learners in level I would be operating in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06272 | Other Language II | 9-12 | This code will be used for students transferring into the State of North Dakota with preexisting world language credits that are not currently mapped or aligned to the existing course codes. For the transcript, please name the specific world language for which credit is given (i.e., Swedish II). Level II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice High-Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $1 / 2$ or 1 <br> Max credit $=1$ | N/A - used for courses that are being transferred in |
| 06273 | Other Language III | 9-12 | This code will be used for students transferring into the State of North Dakota with preexisting world language credits that are not currently mapped or aligned to the existing course codes. For the transcript, please name the specific world language for which credit | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | is given (i.e., Swedish III). Level III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c |  |
| :---: | :---: | :---: | :---: | :---: |
| 06274 | Other Language IV | 9-12 | This code will be used for students transferring into the State of North Dakota with preexisting world language credits that are not currently mapped or aligned to the existing course codes. For the transcript, please name the specific world language for which credit is given (i.e., Swedish IV). Level IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| RUSSIAN |  |  |  |  |  |
| 06310 | Russian I | 9-12 | Designed to introduce students to the Russian language and culture. Learners in level I would be operating in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: |
| 06311 | Russian II | 9-12 | Russian II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice HighPerformance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | 06037-Russian <br> - K-12, 1-12, 5-12, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06312 | Russian III | 9-12 | Russian III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; <br> 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPANISH |  |  |  |  |  |
| 06211 | Spanish I | $\begin{gathered} 8 \\ \text { (See note) } \\ 9-12 \end{gathered}$ | Spanish I introduces students to the Spanish language and culture. Learners in level I operate in the Novice Low-Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice Mid Performance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NL; 1.1 NM; 1.2 NL; 1.2. NM; 1.3.NL; 1.3. NM <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c <br> (Note: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit.) | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06035-Spanish <br> - K-8, K-12, 1-8, 1-12, 5-8, 5-12, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| 06212 | Spanish II | 9-12 | Spanish II builds upon skills developed in level I. Learners in level II operate in the Novice Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners typically will be comfortable functioning within the Novice HighPerformance Indicators within the Communication goal by the end of the course. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.NH; 1.2.NH; 1.3.NH <br> - 2.1.N.a, 2.1.n.b, 2.1.N.c; 2.2.N.a <br> - 3.1.N.a; 3.1.N.b; 3.2.N.a; 3.2.N.b <br> - 4.1.N.a; 4.1.N.b; 4.1.N.c; 4.2.N.a; 4.2.N.b <br> - 5.1.N.a; 5.1N.b; 5.1.N.c; 5.2.N.a; 5.2.N.b; 5.3.N.a; 5.3.N.b; 5.3.N.c | $1 / 2$ or 1 <br> Max credit $=1$ |
| :---: | :---: | :---: | :---: | :---: |
| 06213 | Spanish III | 9-12 | Spanish III builds upon skills developed in level II. Learners in level III typically progress towards the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level III progress towards Intermediate Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IL; 1.2.IL; 1.3.IL <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b <br> - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; <br> 5.3.1.b; 5.3.1.c | $1 / 2$ or 1 <br> Max credit $=1$ |
| 06214 | Spanish IV | 9-12 | Spanish IV builds upon skills developed in level III. Learners in level IV will operate in the Intermediate Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level IV typically progress towards an Intermediate Mid Proficiency level within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IM; 1.2.IM; 1.3.IM <br> - 2.1.I.a; 2.1.I.b; 2.1.I.c; 2.1.I.d; 2.2.I.a; 2,2,I.b <br> - 3.1.I.a; 3.1.I.b; 3.2.I.a; 3.2.I.b <br> - 4.1.I.a; 4.1.I.b; 4.1.I.c; 4.2.I.a; 4.2.I.b | $1 / 2$ or 1 <br> Max credit $=1$ |

License Code:
06035-Spanish

- K-8, K-12, 1-8, 1-12, 5-8, 5-12, or 9-12


## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  |  | - 5.1.I.a; 5.1.i.b; 5.1.i.c; 5.2.1.a; 5.2.I.b; 5.2.I.c; 5.3.I.a; 5.3.1.b; 5.3.1.c |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 06215 | Spanish V | 9-12 | Spanish V builds upon skills developed in level IV. Learners in level V typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in level V progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.IH; 1.2.IH; 1.3.IH <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; 5.3.A.a; 5.3.A.b; 5.3.A.c | $1 / 2$ or 1 <br> Max credit $=1$ |  |  |
| 06216 | Heritage Learners | 9-12 | Heritage learners are students who speak their native language at home but have had little to no formal training in the language. Thus, these students are bilingual to some extent, but they would benefit from expanding their bilingual skills in a wide range of contexts. This course will enable students to develop, maintain, and enhance proficiency in their native language. Students will build on their oral skills and develop their literacy skills in their native language. Students who are literate in their first language will learn English more quickly and easily. This will aid academic achievement in English and spill over into other disciplines. This course will promote bilingualism and biliteracy. <br> The standards taught in this course will be dependent on the level of learners. These learners generally present with intermediate-low interpersonal verbal skills level or above and a discrepancy of at least one proficiency level below for interpretive, presentational, and/or writing skills. | $\begin{gathered} 1 \\ \text { Max credit }=4 \end{gathered}$ |  |  |

# HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES <br> GRADES 9-12 

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SPANISH (Continued) |  |  |  |  |  |
| 06584 | Advanced Placement Spanish Language and Culture® | 10-12 | Designed by the College Board, this course builds on previous levels. Learners in this course typically progress towards the Advanced Performance Indicators of the North Dakota Indigenous and World Language Standards. Learners in AP progress towards Advanced Low Proficiency within the Communication goal. <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 06585 | Advanced Placement Spanish Literature and Culture© | 10-12 | Designed by the College Board, this course builds on previous levels. The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretive), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place as students reflect on the many voices and cultures in the required readings. The course also strongly focuses on cultural connections and comparisons, including exploring various media (e.g., art, film, articles, and literary criticism). <br> This course must meet or exceed the following North Dakota Indigenous and World Languages Content Standards: <br> - 1.1.AL; 1.2.AL; 1.3.AL <br> - 2.1.A.a; 2.1.A.b; 2.1.A.c; 2.1.A.d; 2.2.A.a; 2.2.A.b; 2.2.A.c; 2.2.A.d <br> - 3.1.A.a; 3.1.A.b; 3.2.A.a; 3.2.A.b <br> - 4.1.A.a; 4.1.A.b; 4.1.A.c; 4.2.A.a; 4.2.A.b <br> - 5.1.A.a; 5.1.A.b; 5.1.A.c; 5.2.A.a; 5.2.A.b; 5.2.A.c; 5.2.A.d; <br> 5.3.A.a; 5.3.A.b; 5.3.A.c | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 06035-Spanish <br> - K-8, K-12, 1-8, 1-12, 5-8, $5-12$, or 9-12 |

## HIGH SCHOOL INDIGENOUS AND WORLD LANGUAGES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Indigenous and World Languages require 120 contact hours per credit.

|  |  | Learners in this course must meet the intermediate high <br> communication standard and must meet the advanced standard in <br> all other areas. |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 00069 | Homeroom/Study Hall | 9-12 |  | This is a non-credit course | License Code: Any Teaching License |
| 19010 | Educating Exceptional Students | 9-12 | A study of the characteristics of the exceptional student. Current delivery models, educational adaptations, and best practices for the regular classroom teacher of a mainstreamed student are stressed. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 19015 Special Education <br> - K-12, 1-12, K-8, 1-8, 5-12 19055 Strategist <br> - K-12, 1-12, K-8, 1-8, 5-12 19040 Emotional Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19005 Intellectual Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19025 Learning Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19045 Visually Impaired <br> - K-12, 1-12, K-8, 1-8, 5-12 19020 Hearing Impaired <br> - K-12, 1-12, K-8, 1-8, 5-12 19007 Speech Language Pathology <br> - K-12, 1-12, K-8, 1-8, 5-12 50080 School Psychologist <br> - K-12, 1-12, K-8, 1-8, 5-12 19037 Early Childhood Special Education |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 19020 | Special Education Field Experience <br> - Recommended Prerequisite: Educating Exceptional Students, Teaching Professionals, Education Methodology | 9-12 | Students participate in a 40-hour special education teaching field experience related to a disability category of their choice alongside an expert mentor teacher. The student will reflect and respond to feedback to improve understanding of methods of instruction, differentiation for students with disabilities, and how to manage the learning environment. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 19015 Special Education <br> - K-12, 1-12, K-8, 1-8, 5-12 19055 Strategist <br> - K-12, 1-12, K-8, 1-8, 5-12 19040 Emotional Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19005 Intellectual Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19025 Learning Disabilities <br> - K-12, 1-12, K-8, 1-8, 5-12 19045 Visually Impaired <br> - K-12, 1-12, K-8, 1-8, 5-12 19020 Hearing Impaired <br> - K-12, 1-12, K-8, 1-8, 5-12 19007 Speech Language Pathology <br> - K-12, 1-12, K-8, 1-8, 5-12 50080 School Psychologist <br> - K-12, 1-12, K-8, 1-8, 5-12 19037 Early Childhood Special Education <br> - B-3 |
| 20045 | Exploratory Foreign Language \& Cultures | 9-12 | Introduces the languages and cultural heritages of one or more cultures, civilizations, or countries. Content may include (but is not limited to) art, music, literature, food, and sport and leisure activities of the cultures, civilizations, or countries being studied. Language and dialect of the cultures, civilizations, and countries being studied may also be covered. | 1 <br> Max Credit - 1 | License Code: Any Teaching License |
| 20060 | Career Management | 9-12 | Career Management helps students identify and evaluate personal goals, priorities, aptitudes, and interests to help them make informed career decisions. This course exposes students to various work-based learning experiences (i.e., career fairs, industry tours, informational interviews, job shadows, career mentoring, and work simulations) and may also assist them in developing job search and employability skills. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=2 \end{gathered}$ | License Code: Any Teaching License <br> OR 47000-Career Advisor - 5-12 |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20065 | Successful School and Life Skills | 9-12 | This course is designed to address the challenges that students experience in high school so they can succeed in the classroom as well as the workplace. Course topics may include communication skills; personal assessment and awareness activities; testtaking/study skills; time management; choices and consequences; technology, business, and financial literacy. Additional topics can include exercises designed to generate organized, logical thinking and writing to help with job preparation, readiness, application, or interview skills. | $1 / 4,1 / 2$ or 1 <br> Max credit $=6$ |  |
| 20066 | Leadership | 9-12 | Leadership is designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics. | $1 / 4,1 / 2$ or 1 <br> Max credit $=1$ | License Code: Any Teaching License |
| 20067 | Alternative High School Mentor/Mentee | 9-12 | Mentor/Mentee is designed to aid students in Alternative Education Schools in setting educational and career goals. Students in grades 9-12, through content/grade-specific courses, will review educational plans, complete career interest inventories, and learn test-taking strategies, among other facets. Students are paired with a teacher/mentor who will be assigned to the student through their subsequent years of schooling. <br> Note: This course may be taught only in an Alternative High School. | $1 / 2$ or 1 <br> Max credit $=4$ |  |
| 20068 | Student Aide | 11-12 | Student Aide is designed to offer students the opportunity to assist instructors in preparing, organizing, or delivering course curricula or to assist other staff members in fulfilling their duties. Students may provide tutorials or instructional assistance to other students. This course could provide experience in a field related to a student's career interests. <br> Note: This course is not designed to replace any of the CTE Cooperative Work Experience courses. | $1 / 4,1 / 2$ or 1 <br> Max credit $=1$ | License Code: Any Teaching License |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20069 | ND Civics Test | 9-12 | The ND Civics Test is a condition of ND high school graduation to ensure that ND students are knowledgeable citizens. The ND Civics test means the one hundred questions that, as of January 1 , 2015, officers of the United States citizenship and immigration services use as the basis for selecting the questions posed to applicants for naturalization so that the applicants can demonstrate a knowledge and understanding of the fundamentals of United States history and the principles and form of United States government as required by 8 U.S.C. 1423. The test(s) may be administered any time after a student is enrolled in grade 7. <br> For graduates of 2017, $60 \%$ of the questions on the Civics test must be passed. After 2017, 70\% of the questions on the Civics test must be passed. <br> Note: Each student's high school transcript must identify when the student successfully passed the ND Civics Tests(s). | This is a noncredit course. | License Code: Any Teaching License |
| 20070 | Academic Community Service Learning | 9-12 | Academic Community Service Learning allows students to take an active part in community projects or organizations by volunteering their time, energy, and talents. This course should be integrated into the academic curriculum to connect the traditional classroom with real-life lessons that come through service. Students will have opportunities to use newly acquired academic skills and knowledge in real-life situations within their community to learn how to solve problems, make decisions, and communicate (written and verbal). This course should include four parts: preparation, service, reflection, and celebration. | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: Any Teaching License |
| 20074 | Workplace Readiness | 9-12 | Prepares students for collaborative work education/internship opportunities. It also prepares students for real-world work. | $1 / 2$ or 1 <br> Max credit $=2$ |  |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20075 | Seminar | 9-12 | Seminar courses vary widely but typically offer a small peer group the opportunity to investigate areas of interest. Course objectives may include improvement of research and investigatory skills, presentation skills, interpersonal skills, group process skills, and problem-solving and critical-thinking skills. Seminars aimed at juniors and seniors often include a college and career exploration and planning component. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: Any Teaching License |
| 20076 | Career Seminar | 9-12 | Provides students with a regularly scheduled, supervised employment opportunity related to the teacher-of-record's (TOR) major/minor to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the TOR major/minor. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for student progress assessment and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. <br> NOTE: This course is not designed to replace any of the CTE Cooperative Work Experience courses. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: Any Teaching License <br> OR 47000-Career Advisor <br> - 5-12 |
| 20077 | AP Research | 11-12 | AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. | $\begin{gathered} 1 \\ \text { Max Credit - } 1 \end{gathered}$ | License Code: Any Teaching License |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20078 | AP Seminar | 10-12 | AP Seminar is an approved College Board Advanced Placement Course. This yearlong course has students investigate real-world issues from multiple perspectives. Students learn to synthesize information from different sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations individually and as a team. | 1 <br> Max Credit - 1 | License Code: Any Teaching License |
| 20080 | Advancement Via Individual Determination (AVID) | 9-12 | AVID courses encourage students to pursue college readiness (and eventual enrollment). Typically, the courses offer activities that enable students to learn organizational and study skills, enhance their critical thinking skills, receive academic assistance as necessary, and be motivated to aspire to a college education. <br> NOTE: This is an AVID course; only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: Any Teaching License <br> (See note) |
| 20084 | Teaching Professional | 9-12 | Teaching Profession courses introduce students to the principles underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in education. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: Any Teaching License |
| 20085 | Educational Methodology | 9-12 | Educational Methodology courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their teaching objectives, design lesson plans, and experience teaching in a controlled environment. Students examine and practice teaching strategies, learning styles, time management, and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: Any Teaching License |
| 20086 | Education Workplace Experience | 9-12 | Education Workplace Experience courses provide students with work experience in education-related fields. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may also include classroom activities involving the further study of the field or discussion regarding experiences that students encounter in the workplace. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: Any Teaching License |

GENERAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in General Education require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20090 | Adventure Education | 9-12 | Adventure Education is designed to teach students healthy lifelong activities and provide students with teachable moments. Examples of activities can include but are not limited to hiking, camping, trail creating and maintenance, kayaking, biking, archery, first aid, basic survival skills, pro-social enrichments, snowshoeing, cross-country skiing, rock climbing, orienteering, frisbee golf, land conservation, yoga, and slackline. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: Any Teaching License |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB). Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## GOVERNOR'S SCHOOL COURSE CODES

 GRADES 10-11Governor's School is a summer school offered program only.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51010 | Governor School Experimental Science | 10-11 | Students will participate in a broad-based training program in laboratory science during the first week of Governor's Schools. They then will be paired with a mentor scientist and will join a research group (in biology, biochemistry, chemistry, materials science, pharmacy, or physics) based on the student's interest and availability of projects. The student will further develop their laboratory skills and learn quantitative datahandling techniques. The students will present their research in a poster session during the final week of Governor's Schools. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51011 | Governor School Mathematics | 10-11 | The focus of the students in Mathematics will be on select areas of mathematics theory, applied discrete mathematics, and technology related to mathematics. Students also will learn about mathematics technology, such as the functioning of graphics calculators and computer software | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51012 | Governor School Information Technology | 10-11 | The Information Technology students will explore a broad range of computer skills and real-world applications. Students will learn Internet technologies, including Web development and networking, as well as computer programming, with a focus on developing computer games. They will interact with area professionals and work on projects, both individually and in groups. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51013 | Governor School English Studies | 10-11 | Students experience a progressive "tour of the disciplines" within English studies: creative writing, literature studies, linguistics, rhetoric and composition, new media studies, and English education. Students work independently within specific areas and, assisted by a mentor, produce their cutting-edge projects. They also attend workshops on such topics as Shakespeare in film, writing for the Web, anime and gender, and dialects of the Northern Plains. The program's final product is an online journal designed, edited, and written by the students. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51014 | Governor School - Visual Arts | 10-11 | Scholars will immerse themselves in mediums such as printmaking, photography, sculpture, and visual graphics. The outcome of these concentrations will be to do public displays at gallery locations and perhaps at local venues. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## GOVERNOR'S SCHOOL COURSE CODES

## GRADES 10-11

Governor's School is a summer school offered program only.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 51015 | Governor School Performing Arts | 10-11 | In partnership with Fargo company Theatre B, scholars will work in an ensemble-based, collaborative environment where they create and likely perform a highly creative theatrical production. They also will train together in rigorous and invigorating performance techniques. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51016 | Governor School Engineering | 10-11 | Students experience mechanical, electrical, civil, industrial, manufacturing, and construction engineering during the first week of Governor's Schools. They are then paired with a research engineer mentor and join a research group based on their interest and availability of projects. Students will conduct research to discover innovative solutions to real-world problems and present their findings in a poster session during the final week of Governor's Schools. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 51018 | Governor School Architecture/ Landscape Architecture | 10-11 | Students will learn the basics of the design process, including ordering skills, function, structure, context, sustainability, aesthetics, historical precedent, sketching, and documenting a design solution. The students will then be engaged in designing and constructing a built object serving the needs of the FargoMoorhead community. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07021 | Sign Language I | 9-12 | This sequential program begins with the basic knowledge of American Sign Language finger spelling, sign vocabulary, basic grammar, and basic conversational skills. Fundamental aspects of the deaf culture and the deaf community are incorporated. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07020-Sign Language -9-12 |
| 07022 | Sign Language II | 9-12 | Sign Language II will increase understanding of American Sign Language and its cultural features. Sign language vocabulary is increased. Continuation of Sign Language I with greater emphasis on expressive and receptive signing skills. (Pre-requisite, Sign Language I) | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 07023 | Sign Language III | 10-12 | Continued study of American Sign Language and its syntax, grammar, and cultural features. Opportunities to develop competency and fluency in the use of American Sign Language. (Pre-requisite Sign Language II) | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 07024 | Sign Language IV | 10-12 | Further study of the American Sign Language, its syntax, grammar, and cultural features. Advanced skill development in the use of American Sign Language. (Pre-requisite Sign Language III) | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 07025 | Sign Language Cooperative Education | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to sign language occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience. A training agreement is to be developed between work experience partners outlining the expectations of the experience. The training plan shall include provisions for assessment of student progress and or on-site visits by the instructor during student placement. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 07031 | Nurse Assistant Foundation | 9-12 | The Nurse Assistant Foundation course offers classroom instruction and the necessary skills practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care, or home health care. This course does not require supervised clinical practice hours, but will provide the necessary curriculum and supervised skills training to challenge the state CNA board exam provided by the North Dakota Board of Nursing to become a certified CNA | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07033-Health Careers -10-12 |
| 07032 | Nurse Assistant | 10-12 | The Nursing Assistant Training program offers classroom instruction and clinical practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care, or home health care. This program includes supervised practical training and clinical practice as required by the North Dakota Board of Nursing. A certificate is issued upon completion of the class. Students also can take the state CNA board exam to acquire state certification. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07033 | Health Science I | 9-12 | The Health Science course is an introduction to subject matter pertaining to medically related careers. This introductory course is to help students interested in the medical field determine if a medical career is appropriate for their interests and capabilities. This course will cover subject matter such as History of Medicine, Health Care Systems, Careers in Healthcare and Career Exploration, Personal Qualities and Employability Skills, CPR/First Aid training, Infection Control, Introduction to Anatomy and Physiology and Disease Processes, Safety in Healthcare, Legal and Ethical in Healthcare, Fundamentals of Nutrition, and Growth and Development of the Human Body. | 1 or 2 <br> Max credit $=2$ |  |
| 07034 | Prevention/Care of Athletic Injuries | 9-12 | Provides the student with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder management daily for 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 in one semester. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07033-Health Careers <br> -9-12 |
| 07035 | Health Science II <br> - Prerequisite: Health Science I | 10-12 | The Health Science II course is available to students who have taken Health Science I and wish to investigate their interest in the medical field further. This course will allow students to study the subject matter covered in Health Science I further and in-depth. Students will expand their skills and knowledge in specific areas of interest as well as have the opportunity for job shadowing experiences in areas of their interest. Emphasis on academics, professional development, leadership, and organizational skills are discussed and practiced throughout this course. | 1 or 2 <br> Max credit $=2$ |  |
| 07036 | Medical Terminology | 9-12 | 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 studies for each body system. The student will also learn medical terminology related to pathology, diagnostic, surgical, clinical, and laboratory procedures, and common abbreviations and acronyms by body systems. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07033-Health Careers <br> - 10-12 |

## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07038 | Introduction to Nursing | 11-12 | This course introduces students to professional nursing roles and attributes. The Quality and Safety Education for Nurses (QSEN) framework will explore standards of nursing care, therapeutic communication, and quality and safety concerns. The University of Mary competencies, Division of Nursing philosophy, and Benedictine values will be explored and applied to nursing. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07033-Health Careers - 10-12 |
| 07040 | Medical Records | 9-12 | To prepare students for employment as medical records clerks. The program covers a wide range of necessary skills, including answering the phone, greeting patients, recording, and filing patient medical records, filling out insurance forms, handling correspondence, and scheduling appointments. The student will also gain an understanding of medical terminology and hospital or clinic procedures, including making arrangements for hospital admissions and laboratory services, handling billing, and bookkeeping. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 07040-Medical Records -9-12 |
| 07044 | Emergency Medical Services Foundation | 9-12 | The Emergency Medical Services Foundations course places a special emphasis on the knowledge and skills needed in medical emergencies. Topics typically include clearing airway obstructions, controlling bleeding, bandaging, methods for lifting and transporting injured persons, simple spinal immobilization, infection control, stabilizing fractures, and responding to cardiac arrest. The courses may also cover the legal and ethical responsibilities of dealing with medical emergencies. These courses may better prepare students to obtain certifications such as Emergency Medical Response (EMR), CPR, First Aid, Incident Command System (ICS), and Wilderness First Responder. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 07045-Emergency |
| 07045 | Emergency Medical Services | 9-12 | Students enrolling in this course will complete training in CPR for Health Care Providers and the Nationals Curriculum Emergency Medical Technician - Basic Course. The course prepares students to respond to emergencies such as heart attacks, auto accidents, and diabetic problems. Students participate in extensive "hands-on" practical sessions using modern prehospital care equipment under the instruction of paramedics from the local paramedic service. Students also receive exposure to various health careers using professional guest speakers. Upon completion of the course, students are eligible for ND State licensure testing, and they will have extensive knowledge and experience to aid them in choosing a healthcare career. | 1 or 2 <br> Max credit $=2$ | Medical Services <br> - 9-12 |

## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07046 | Advanced EMS <br> Prerequisite: Emergency Medical Services | 10-12 | The Advanced Emergency Medical Technician (AEMT) program prepares students to provide basic and limited advanced emergency medical care and transportation for patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary for patient care and transportation. Advanced Emergency Medical Technicians are part of the comprehensive EMS response under medical oversight. AEMT perform interventions with the basic and advanced equipment typically found in an ambulance. The AEMT is a link from the scene to the emergency health care system. Advanced skills taught in the course include IV placement and maintenance and introduction to cardiac monitoring. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 07045-Emergency Medical Services -9-12 |
| 07050 | Medical Diagnostic Technology 1a: Introduction | 9-12 | Students will explore different diagnostic technology and essential body systems and fluids that must be understood to accurately diagnose a disease, condition, or illness. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 07050-Medical Diagnostic Technology 1a: Introduction -9-12 |
| 07100 | Firefighting | 11-12 | The course is designed to give students new to firefighting the practical and cognitive training needed to operate safely and effectively on the fireground. Students will learn the fundamental skills of becoming a fire fighter: Fire Service; Health and Safety; Personal Protective Equipment; Communications; Fire Behavior; Building Construction; Portable Fire Extinguishers; Tools and Equipment; Ropes and Knots; Forcible Entry; Ladders; Search and Rescue; Ventilation; Water Supply Systems; Fire Hose Appliances and Nozzles; Supply Line and Attack Line; Fire Suppression; Fire Fighter Survival; Salvage and Overhaul; Rehabilitation; Wildland and Ground Cover Fires; Hazardous Materials; and Incident Command Systems. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 07100-Firefighting -11-12 |

## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07950 | Capstone-Health Sciences | 11-12 | This course is the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 07033-Health Careers -9-12 |

## HIGH SCHOOL HEALTH SCIENCES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Health Sciences require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 07999 | Health Education Supervised Occupational Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Health Career Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction pertaining to the work experience, consistent with the student's occupational goals, and related to the health program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessing student progress and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of 1 credit per semester, not to exceed 4 credits while in high school. <br> Max credit $=4$ | License Code: 07033-Health Careers -9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL OF BUSINESS PROGRAM COURSE CODES <br> GRADES 9-12

These courses are ONLY for those instructors who have completed the High School of Business National Certification.
High school (grades 9-12) courses in High School of Business require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04311 | HSB - Leadership for Business | 9 | Leadership, a project-based leadership course, develops student understanding and skills in communication, emotional intelligence, operations, and professional development. Students acquire an understanding and appreciation of the need for leadership skills. To encourage immediate implementation of leadership skills, Leadership utilizes an ongoing service-learning project for course delivery and reinforcement. The course content is sequenced for students to identify, plan, implement, and evaluate a servicelearning project based on the needs of their community/school. Throughout the course, students are presented with problemsolving situations for which they must apply academic and criticalthinking skills. Formal reflection is an ongoing component of the course. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, or 9-12 OR 04006-CTE Marketing Education <br> - 5-12 or 9-12 <br> AND <br> 04311-High School of Business-Leadership for Business <br> - 5-12 |
| 04312 | HSB - Wealth Management <br> - Suggested Prerequisite: Leadership for Business | 9-12 | Wealth Management is an accelerated financial literacy course in which High School of Business ${ }^{\text {TM }}$ students actively learn to manage and build personal wealth. Students develop an understanding of the relationship between economics and wealth management, set personal and financial goals, establish a personal budget, manage personal finances, explore methods of generating income, determine insurance needs, and acquire investing skills and knowledge. To demonstrate their mastery of such financial literacy skills and knowledge, students engage in an intensive project to educate those around them (e.g., fellow high school students, adult members of the community, etc.) about wealth management, its importance, and its impact upon a person's overall success in life. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 03025-CTE Business Education <br> -K-12, 1-12, 5-12, or 9-12 OR <br> 04006-CTE Marketing Education <br> - 5-12 or 9-12 <br> AND <br> 04312-High School of Business-Wealth Management - 5-12 |

## HIGH SCHOOL OF BUSINESS PROGRAM COURSE CODES <br> GRADES 9-12

These courses are ONLY for those instructors who have completed the High School of Business National Certification.
High school (grades 9-12) courses in High School of Business require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04313 | HSB - Principles of Business <br> - Suggested Prerequisite: Leadership for Business and Wealth Management | 9-12 | Principles of Business, a project-based business course, develops student understanding and skills in business law, economics, financial analysis, human resources management, information management, marketing, operations, and strategic management. Through three projects, students acquire an understanding and appreciation of the business world. They develop a business analysis report, conduct an environmental scan of the local business community, and investigate business activities. Current technology will be used to acquire information and to complete the projects. Throughout the course, students are presented with problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an ongoing component of the course. | $1 / 2$ <br> Max credit $=1 / 2$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 04006-CTE Marketing Education <br> - 5-12 or 9-12 <br> AND <br> 04313-High School of Business-Principles of Business <br> - 5-12 |
| 04314 | HSB - Business Economics | 9-12 | In Business Economics, a project-based business course, students expand their understanding that businesses are influenced by external factors often beyond their control. Consumer spending, government policies, economic conditions, legal issues, and global competition are addressed through practical applications to everyday societal and business life. Students develop their knowledge and skills in economics, entrepreneurship, and professional development. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, or 9-12 OR <br> 04006-CTE Marketing Education <br> -5-12 or 9-12 <br> AND <br> 04314-High School of Business-Business Economics <br> - 5-12 |

## HIGH SCHOOL OF BUSINESS PROGRAM COURSE CODES <br> GRADES 9-12

These courses are ONLY for those instructors who have completed the High School of Business National Certification.
High school (grades 9-12) courses in High School of Business require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04315 | HSB - Principles of Marketing | 10-12 | Principles of Marketing is a project-based business course that develops student understanding and skills in channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Students acquire an understanding and appreciation of each of the marketing activities. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> -K-12, 1-12, 5-12, or 9-12 OR <br> 03025-CTE Business Education <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 04006-CTE Marketing Education <br> -5-12 or 9-12 <br> AND <br> 04315-High School of Business-Principles of Marketing <br> - 5-12 |
| 04316 | HSB - Principles of Finance | 10-12 | Principles of Finance furthers student understanding of two specific business activities-accounting and finance-introduced in an earlier High School of Business course, Principles of Business. Students make connections between accounting and finance through team activities and a semester-long corporate investment project. Students acquire an understanding of financial statements, calculate financial ratios, and make corporate financial management decisions based on their analysis of that financial data. In addition, students apply the concepts of operating and overhead costs, internal accounting controls, and budgets to their class business. Lastly, cost/benefit analysis is introduced as an element of financial planning and decision-making. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 03020-Business Ed/General Business <br> -K-12, 1-12, 5-12, or 9-12 OR <br> 03025-CTE Business Education <br> -K-12, 1-12, 5-12, or 9-12 OR <br> 04006-CTE Marketing Education <br> - 5-12 or 9-12 <br> AND <br> 04316-High School of Business-Principles of Finance <br> - 5-12 |

## HIGH SCHOOL OF BUSINESS PROGRAM COURSE CODES <br> GRADES 9-12

These courses are ONLY for those instructors who have completed the High School of Business National Certification. High school (grades 9-12) courses in High School of Business require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04317 | HSB - Principles of Management | 11-12 | Principles of Management furthers student understanding of management introduced in an earlier High School of Business ${ }^{\text {TM }}$ course, Principles of Business. Students make connections between management and business success through individual and team activities and a semester-long project. Students acquire an understanding of legal and ethical issues associated with management; initiate, plan, implement and control, and close a project; motivate team members; delegate work; develop a chain of command; coordinate work efforts; and interpret statistical findings. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 03020-Business <br> Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 03025-CTE Business Education <br> $\mathrm{K}-12,1-12,5-12$, or 9-12 <br> OR <br> 04006-CTE Marketing Education <br> -5-12 or 9-12 <br> AND <br> 04317-High School of Business-Principles of Management - 5-12 |
| 04318 | HSB - Business Strategies | 12 | Business Strategies, the capstone course for the High School of Business ${ }^{\text {TM }}$ program, develops student understanding and skills in business law, entrepreneurship, financial analysis, human resources management, and strategic management. Students acquire a realistic understanding of what is required to open and successfully run a business by planning, organizing, staffing, directing, leading, and controlling business activities. They conduct situational, market, and competitive analyses; select a target market; develop a business plan; recruit, interview, select, and hire staff; supervise staff; control use of resources; and evaluate the results of the business effort. Throughout the course, students make decisions and use problem-solving skills. Formal reflection is an ongoing component of the course. | Max credit = 1/2 | License Code: 03020-Business <br> Ed/General Business <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 03025-CTE Business <br> Education <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 04006-CTE Marketing Education <br> - 5-12 or 9-12 <br> AND <br> 04318-High School of Business-Business Strategies - 5-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02 and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.
December 8, 2022

# HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES 

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27101 | Introduction to Information Technology | 9-12 | An exploratory level course that provides exposure to careers and issues in information technology. Students will develop SCAN skills, including teamwork, communication, entrepreneurship, and personal management. Students will also gain hands-on experience in three major IT areas, including: <br> - Hardware and Software: Safety and tools, numbering systems and basic electricity, operating systems, troubleshooting, etc. <br> - Networking: LAN fundamentals, peer-to-peer networking, IP addressing, troubleshooting, etc. <br> - Programming/Interactive Media: Visual Basic and HTML basics | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 27101-CTE Information Technology - 5-12 |
| 27102 | Computer Software Applications | 9-12 | Semester modules in computer applications may include a broadbased overview of office suites or skills leading to high-level competencies in spreadsheets, databases, presentations, desktop publishing, etc. Students will gain skills at the proficient or expert level in office suite software. Successful attainment of competencies within each office suite prepares students for industry certification, such as MOUS (Microsoft Office User Specialist). | $\begin{gathered} 1 / 2,1, \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 27102-CTE Computer Software <br> - 5-12 |
| 27111 | Internet of Things (IoT) Fundamentals | 9-12 | Internet of Things (IoT) Fundamentals provides students with a comprehensive understanding of the Internet of Things (IoT). It develops foundational skills using hands-on lab activities that stimulate the students to apply creative problem-solving and rapid prototyping in the interdisciplinary domain of electronics, networking, security, data analytics, and business. Outcoming students can ideate, design, prototype, and present an loT solution for an identified business or society need. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27111-CTE Internet of Things (loT) Fundamentals - 5-12 |
| 27120 | Introduction to Programming Languages | 9-12 | This course will provide students with a solid foundation for understanding the fundamental concepts of programming languages. It will include coverage of concepts and constructs from languages like C\#, JAVA ${ }^{\text {TM }}$, JavaScript ${ }^{\text {TM }}$, Perl, PHP, Python, Ruby, XHTML, XSLT, and JSP. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27120-CTE Introduction to Programming Languages <br> -5-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27121 | Integrated Mathematics for Computer <br> Science/Information Technology (Career and <br> Technical Education Information Technology) <br> - Prerequisite: Algebra I and Computer Science Programming | 9-12 | This course is computer science with a major focus on math. Course topics are divided into six areas: sets, functions, and relations; basic logic; proof techniques; counting basics; graphs and trees; and discrete probability. Mathematical topics are interwoven with computer science applications to enhance the student's understanding of the introduced mathematics while students develop the ability to see computational problems from a mathematical perspective. Topics also include the study of properties and operations of the real number system, evaluating rational algebraic expressions, solving and graphing first-degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratic equations. Algorithms in both mathematics and computer science contexts will be explored in depth. <br> Note: This course can only be taught for Career and Technical Education - Information Technology credit. For Computer Science credit, Integrated Mathematics for Computer Science/Information Technology can be found under Computer Science. For Mathematics credit, Integrated Mathematics for Computer Science/Information can be found under Mathematics. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27121-Integrated Mathematics for Computer Science/Information Technology <br> -9-12 |
| 27122 | Programming Essentials-Visual Basics | 9-12 | Basic programming concepts are presented, which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming, including logic, design, coding, structure, and controls, are addressed. Careers in programming are explored, and students are provided opportunities to increase their communication, teamwork, and critical thinking skills. Business projects show how programming skills are used in the business world. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 27122-CTE <br> Programming <br> Essentials-Visual Basics <br> -9-12 |
| 27123 | Programming Essentials-Python | 9-12 | The course aims to familiarize the student with general computer programming concepts like conditional execution, loops, Python programming language syntax, semantics, and the runtime environment, as well as with general coding techniques and objectoriented programming. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27123-CTE <br> Programming Essentials-Python <br> -9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27124 | Programming Essentials - C++ | 9-12 | This course teaches the basics of programming in the C++ programming language and the fundamental concepts and techniques used in object-oriented programming. The course begins with the universal basics, without relying on object concepts, then gradually extends to advanced concepts encountered using the objective approach. <br> This course focuses on the following: <br> - Describe the universal concepts of computer programming. <br> - Use the syntax, semantics, and basic data types of the C++ language. <br> - Resolve typical implementation problems using standard C++ language libraries. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27124-CTE <br> Programming Essentials-C++ -9-12 |
| 27125 | Fundamentals of JAVA Programming | 9-12 | The Fundamentals of JAVA Programming Language course provides a conceptual understanding of Object-Oriented programming. The course also teaches students how to use JAVA's Conditional Control Structures, Loop Structures and Strings, Classes and Object-Oriented Development, Inheritance and Polymorphism, Arrays, GUIS, and Event-Driven Programming. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27125-Fundamentals of JAVA Programming -9-12 |
| 27127 | Advanced JAVA Programming | 9-12 | The Advanced JAVA Programming course will present concepts similarly covered by Advanced Placement Computer Science and is comparable to an introductory sequence of courses for computer science majors offered in college and university computer science departments. Students completing the course will be able to design and implement computer-based solutions to problems in several application areas; learn, organize, and process well-known algorithms and data structures; be able to develop and select appropriate algorithms and data structures to demonstrate problem-solving; design strategies and methodologies; analyze potential solutions, and understand the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem-solving and design using Java language, representing proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. Students will be able to code fluently in a well-structured fashion using the programming language JAVA and read and understand a large program and a description of the design and development process leading to such a program. <br> Note: This course can only be taught for Career and Technical Education - Information Technology credit. For Mathematics credit, Advanced JAVA Programming can be found under Mathematics. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27127-Advanced JAVA Programming -9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27128 | Mobile Applications Development | 9-12 | This course will introduce students to mobile application development and management using various commercial and open-source software. Topics to be included in the course are (1) Installation and modification of application; (2) Code modification; (3) Design and implementation; (4) Database systems management; (5) Security; and (6) Customer Service. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27128-Mobile Applications Development - 9-12 |
| 27130 | Computer Gaming and Design | 9-12 | Computer Gaming and Design courses prepare students to design computer games by studying design, animation, artistic concepts, digital imaging, coding, scripting, multimedia production, and gameplay strategies. Advanced course topics include, but are not limited to, level design, environment, and 3D modeling, scene and set design, motion capture, and texture mapping. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27130-CTE Computer Gaming and Design - 5-12 |
| 27131 | Advanced Gaming \& Design | 9-12 | Advanced Computer Game Design courses explore the creative, technical, and conceptual aspects of designing and producing game experiences and products, including reactive (sensory-based devices) and interactive technologies, 3D game mechanics, interface design, games for mobile device applications, social media, and web multimedia, and/or augmented and virtual reality games. Topics may include aesthetic meaning; artistic, design, and technical methods and practices; game construction and development; game theory and dynamics; analysis and media literacy; construction, development, processing, modeling, and programming of game-based experiences; their transmission, distribution, placement, and marketing; and contextual, cultural, and historical aspects and considerations. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27130-CTE Computer Gaming and Design - 5-12 |
| 27170 | Introduction to Web Design | 9-12 | 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 websites. The course is based upon the ISTE's National Educational Technology Standards for Students (NET-S), $21^{\text {st }}$ Century Skills, and the ACM Model Curriculum for K-12 Computer Science. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 27170-Introduction to Web Design -9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27219 | Computer Hardware and Operating Systems (A+) | 9-12 | An introductory course focusing on essential hardware and operating system competencies for an entry-level PC service technician. Students will demonstrate basic knowledge of installing, configuring, upgrading, troubleshooting, and repairing microcomputers and operating systems. Work-based strategies appropriate for this course. Computer Hardware related careers are explored, and students are provided with opportunities to increase their communication, teamwork, and critical thinking skills. Students completing the full-year program will be prepared for computer industry certification, such as CompTIA's A+ certification exam or IC3 certification. (Possible curriculum: ExplorNet, HP/Cisco Sponsored IT Essentials Part 1, Aries, Computer Prep, Element K, etc.) | $1 / 2,1 \text {, or } 2$ <br> Max credit $=2$ | License Code: 27219-Computer Hardware and Operating Systems (A+) <br> -9-12 |
| 27220 | IT Essentials 2 | 9-12 | This course introduces and extends the knowledge of operating systems, the benefits of networking, and types of networks. The physical components of a network are reviewed, including the NIC, types of media, and networking devices that provide Internet connections. The concepts covered in this course include TCP/IP networking, IP addressing, name resolution, and protocols. The importance of a hardware inventory list is stressed, as is verifying compatibility with the network. The steps to install a network operating system, including Windows 2000 and Linux, are covered in detail. <br> The course introduces the responsibilities of a network administrator, including managing users and groups, and creating directories, passwords, and permissions. It covers backup methods and strategies, partition and process management, monitoring server resources, and analyzing network performance. The course discusses troubleshooting the operating system, including identifying the type of problem, creating an emergency boot disk, and the process of disaster recovery. It addresses security issues and how to assess security needs and develop an acceptable-use policy to prevent inside and outside threats. This course will help prepare students for CompTIA's Server+ certification exam. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27220-IT Essentials - 9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27265 | Introduction to Networking | 9-12 | This introduction to networking course introduces students to the principles and practices of designing, building, and maintaining computer networks. Topics include networking administration and support, media and topologies, protocols and standards, network implementation, and network support. The course would prepare students for CompTIA's Network + certification. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27265-Introduction to Networking <br> - 9-12 |
| 27266 | CCNA Introduction to Networks | 9-12 | CCNA Introduction to Networks is the first of the four courses leading to the CCNA industry certification. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the course. Students can build simple LANs, perform basic configuration for routers and switches, and implement IP addressing schemes. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 27266-CTE CCNA <br> Introduction to Networks <br> - 9-12 |
| 27267 | CCNA Routing \& Switching Essentials <br> - Prerequisite: CCNA Introduction to Networks | 9-12 | CCNA Routing and Switching Essentials are the second of four courses that leads to the CCNA industry certification. This course describes a small network's architecture, components, and operations of routers and switches. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, singlearea, and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. <br> Students completing this course can choose to complete the CCENT industry certification. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27267-CTE CCNA Routing \& Switching Essentials <br> -9-12 |
| 27268 | CCNA Scaling Networks <br> - Prerequisite: CCNA Routing \& Switching Essentials | 9-12 | CCNA Scaling Networks is the third of four courses that lead to the CCNA industry certification. This course describes the architecture, components, and operations of routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27268-CTE Scaling Networks <br> - 9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27269 | CCNA Connecting Networks <br> - Prerequisite: CCNA Routing \& Switching Essentials | 9-12 | CCNA Connecting Networks is the last of four courses that lead to the CCNA industry certification. This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 27269-CTE CCNA Connecting Networks <br> - 9-12 |
| 27280 | Introduction to Cybersecurity | 9-12 | Introduction to Cybersecurity covers trends in cybersecurity and career opportunities. Course modules will define cybersecurity, explain its importance, and introduce products and processes to secure data. Students will also explore why cybersecurity is critical in business and medical industries, how hackers use unsuspecting individuals to propagate malware, and why cybersecurity is a growing profession. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27280-CTE Introduction to Cybersecurity <br> - 9-12 |
| 27299 | Special Topics | 9-12 | An examination of special topics in cutting-edge computer information technologies. Some topics may include geographic information systems, telecommunications, internet, data communications, etc. Before instruction, an Alternative Curriculum Form must be submitted for approval to the IT division of the Department of Career and Technical Education. | $\begin{aligned} & 1 / 4,1 / 2,1 \text {, or } 2 \\ & \text { Max credit }=2 \end{aligned}$ | License Code: 27299-CTE Special Topics <br> - 9-12 |
| 27300 | Essentials of Desktop Operating Systems | 9-12 | Students will be introduced to the implementation and desktop support of Microsoft Windows Operating Systems. Essentials of Desktop Operating Systems course will prepare students to install one or multiple operating systems, configure and manage hardware, manage disks, troubleshoot, configure desktop environments, enable network connectivity, configure mobile computing, support remote users, monitor resources and performance, and maintain security. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27300-CTE Windows XP Professional <br> -9-12 |
| 27305 | Essentials of Desktop Operating Systems Linux | 9-12 | This course teaches students the fundamentals of the Linux operating system, command line, and basic open-source concepts. This course focuses on understanding how Linux is used and the basics of the command line, applying skills using a Linux virtual machine with step-by-step and hands-on activities, and building foundational knowledge for progressively mastering Linux commands. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27305-CTE Essentials of Desktop Operating Systems - Linux <br> - 9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27310 | Essentials of Network Operating Systems | 9-12 | Essentials of Network Operating Systems courses study multi-user, multi-tasking network operating systems. In these courses, students learn the characteristics of Microsoft Windows and Linuxbased operating systems and explore various topics, including installation procedures, security issues, backup procedures, remote access, TCP/IP concepts, DNS, digital certificates, and OP security extensions. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27310-CTE Windows 2003 Server <br> -9-12 |
| 27400 | Geographic Information Systems (GIS) | 9-12 | Students will have the opportunity to gather technical skills in 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/or satellite images. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 27400-CTE Geographic Information Systems (GIS) <br> - 9-12 |
| 27500 | Data Modeling and SQL | 9-12 | Students are challenged to identify patterns and connections between information that is not related; to identify key underlying business issues in complex scenarios. This course will prepare students for the "Introduction to Oracle 9i-SQL" Oracle Certified Professional exam. This course focus on the following objectives: <br> - Transform business requirements into an operational database utilizing a top-down, systematic approach. <br> - Create Entity-Relationship Diagrams that accurately model the organization's information needs and support the functions of the business. <br> - Map the information requirements reflected in the EntityRelationship Model into a relational database design. <br> - Create physical, relational database tables to implement the database design. <br> - Manage a data analysis project that delivers a persuasive database design and model for a potential client. <br> - Solve complex business problems using data storage and retrieval techniques. <br> - Articulate issues involving data security and keeping the "history" of data in business systems, as well as the role of the Database Administrator in these practices. <br> - Use interviewing skills and techniques learned as they approach post-secondary education or future employment. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27500-CTE Data Modeling and SQL <br> - 9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27510 | AP Computer Science Principles (CTE) | 10-12 | Focuses on computational thinking, which is vital for success in all disciplines. Students use computational tools to analyze and study data. They also work with large data sets to identify, analyze, and draw conclusions from trends. It also focuses on student creativity and collaboration to develop oral and written communication and problem-solving skills. Students will use software and technology to explore questions that interest them. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 27510-AP Computer Science Principles (CTE) <br> -9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27950 | Capstone-Information Technology Education | 11-12 | This course is the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 27999-CTE Cooperative Work Experience -9-12 |
| 27995 | IT Internship | 9-12 | This course is an integrative experience designed to allow students to expand their knowledge in the IT career pathway. It is a projectbased course incorporating 21st Century Skills, including thinking critically and solving challenging problems. This course is an extension of an IT pathway class a student has already completed or is concurrently in. The student will learn, refine, and apply skills necessary to be successful in IT-related careers. Projects incorporating the broader community and/or some aspect of "giving back" to others outside of school learning experiences are highly encouraged. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=4 \end{gathered}$ | License Code: 27999-CTE Cooperative Work Experience - 9-12 |

## HIGH SCHOOL INFORMATION TECHNOLOGY COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Information Technology require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 27999 | Cooperative Work Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Information Technology Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Information Technology program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessing student progress and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of $1 / 2$ credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: 27999-CTE Cooperative Work Experience <br> - 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

## HIGH SCHOOL MARKETING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Marketing Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04080 | Principles of Marketing | 9-12 | To provide students with the objectives and benefits of a marketing education program and to prepare them for marketing careers. The role, functions, and institution of marketing in the economy and society, marketing career opportunities and requirements, career planning, and necessary personal characteristics for competencies for success. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 04006-CTE Marketing Education <br> - 5-12 or 9-12 |
| 04110 | Principles of Entrepreneurship | 9-12 | To provide students with an introduction to entrepreneurship business opportunities and requirements as well as related career information and self-assessment opportunities. It covers entrepreneurship importance and concepts, characteristics of different business organizations and opportunities, entrepreneurial career examples, individual career assessment and planning, entrepreneurial projects, and simulations. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 04111 | Entrepreneurship | 9-12 | To provide an opportunity for students to explore self-employment benefits versus risks and to develop specific competence in starting a small business. It covers the characteristics of an entrepreneur, economics and the nature of small business, feasibility study, Business Plan Development, type of ownership, location, financing, recordkeeping, management, promotion, legal issues, business protection, and assistance. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 04210 | Marketing I | 10-12 | Marketing I is a course that develops student understanding and skills in business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resource management, information management, marketing, operations, professional development, and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize jobseeking strategies, and participate in career planning. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 04215 | Marketing II <br> - Prerequisite: Marketing I or instructor approval. | 11-12 | This course develops student understanding and skills in channel management, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Through projects, students acquire an understanding and appreciation for marketing activities. Current technology will be used to acquire information and to complete projects. Throughout the course, students are presented with problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an ongoing component of the course. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL MARKETING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Marketing Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04223 | Management <br> - Prerequisite: Marketing I or instructor approval. | 11-12 | This course furthers student understanding and skills in the various marketing functions leading to decisions in business management. Students coordinate channel management with other marketing activities, discuss the nature of marketing plans, generate product ideas, coordinate activities in the promotional mix, and demonstrate specialized sales processes and techniques. The importance of human resource management, personnel, and policies in business are discussed. Current technology will be used to acquire information to complete projects. Students are presented with problem-solving situations for which they apply academic and critical-thinking skills. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 04235 | Social Media Marketing | 9-12 | Social Media Marketing presents online social networking as a business strategy designed to increase customer loyalty and inquiry conversion. Students will study major social media channels and marketing campaign techniques and evaluate contemporary and emerging tools in the digital marketplace, including social bookmarking and techniques to drive social media traffic. Analyses of social media effectiveness will also be explored. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 04239 | Principles of Sports and Entertainment Marketing | 9-12 | To prepare students for marketing occupations in the area of sports and entertainment. This course prepares students interested in sports or entertainment marketing who wish to continue exploring marketing and business-related careers. The course will include an introduction to marketing and business concepts and foundations, including the business and marketing core concepts. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 04006-CTE Marketing Education <br> - 5-12 or 9-12 |
| 04240 | Sports and Entertainment Marketing | 10-12 | To prepare students for marketing occupations in the area of sports and entertainment. Look at the exciting and dynamic sports and entertainment marketing field. One of the largest industries in the world, sports marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment and 2) The marketing of non-sports products and services through sports. You will discover why companies pay to be associated with a team or entertainer; how to develop ticket plans to fill the seats in the arena; why targeting your marketing efforts is so important; and more. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 04245 | Hospitality and Tourism Marketing | 9-12 | To provide the student with an understanding of one of the largest industries in the world. Specific applications include marketing, promoting, and selling products of airlines, international travel, ground transportation, cruising, hotel and lodging, restaurants, and tours. Students will learn the importance of hospitality and tourism's economic impact. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MARKETING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Marketing Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04081 | Principles of Finance | 9-12 | To prepare students to develop and understand skills such as the value of money, financial management, investments, and economic decision-making. Students will understand and appreciate the need for personal financial management and investing. The course will help students understand their role and responsibility in the financial future. | $1 / 2$ <br> Max credit $=1 / 2$ |  |
| 04082 | Business Finance | 10-12 | The student will expand their understanding of finance in this course. Students develop their knowledge and skills in business law, communications, compliance, customer relations, economics, financial analysis, financial information management, human resources, and marketing. Emphasis is placed on the analysis and purchase of securities and investments and the need for effective customer relationship management and information management in finance. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 04290 | School-Based Enterprise | 10-12 | To prepare students for employment. Provides a model store complete with modern business equipment. Retail operation and marketing activities integrated with classroom learning, including involvement in real work situations, various store responsibilities, and other relevant activities; participation in total store operations by student rotation through the store departments of management, merchandising, sales promotion, and controlling. | $1 / 2,1 \text {, or } 2$ <br> Max credit $=2$ | License Code: 04006-CTE Marketing Education <br> - 5-12 or 9-12 |
| 04310 | International Marketing | 11-12 | The content of the International Marketing course focuses on marketing concepts applicable to international marketing business policies, practices, and strategies. Local/state and major international, and regional trade profiles regarding International Marketing functions, institutions, cultures, social environments, natural trade resources, political/financial factors, laws/regulations, and significant economic variables are addressed. Students develop international marketing plans for selected products and services. International marketing career opportunities and requirements are emphasized. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL MARKETING EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Marketing Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04950 | Capstone-Marketing Education | 11-12 | This course is the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 04006-CTE Marketing Education <br> - 5-12 or 9-12 |

## HIGH SCHOOL MARKETING EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Marketing Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 04999 | Cooperative Work Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Marketing and Related Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Marketing Education program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessing student progress and on-site visits by the instructor during the student's placement. <br> Note: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of $1 / 2$ credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: 04006-CTE Marketing Education <br> - 5-12 or 9-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11010 | Remedial Math 9-12 | 9-12 | Sets numeration, operations and properties, mathematical sentences, geometry, measurement, graphing and functions, and probability and statistics. | Supplemental instruction provided as needed |  |
| 11029 | Mathematics Intervention | 9-12 | Mathematics Intervention is designed to assist struggling and/or failing students in a mathematics course. This course should be provided in conjunction with the regular mathematics course to preteach, re-teach, or provide enrichment to the student to prevent the need to modify the school's existing mathematics curriculum. This course should be a structured class period that will build upon the existing mathematics skills needed for students to achieve the opportunity for success in their current and/or future mathematics courses. | $1 / 2$ or 1 <br> Max credit $=3$ |  |
| 11030 | Prealgebra | 9-12 | Prealgebra increases students' foundational math skills and prepares them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving firstdegree equations and inequalities. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 11031 | Algebra I | 8 <br> (See note) $9-12$ | Algebra I includes studying properties and operations of the real number system; evaluating rational algebraic expressions, solving, and graphing first-degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations. <br> NOTE: Use this course when credit is awarded for the full school year. This course code should only be used for MIS03 reporting purposes when a grade 8 student receives high school credit. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 11010-Mathematics - 5-12 |
| 11032 | Algebra II <br> - Recommended Prerequisite: Algebra 1 | 9-12 | Algebra II topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents. The course may introduce topics in discrete math, elementary probability and statistics; matrices and determinants; and sequences and series. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11033 | Discrete Mathematics <br> - Recommended Prerequisite: Algebra II | 11-12 | Discrete Mathematics includes studying topics such as number theory, discrete probability, set theory, symbolic logic, Boolean algebra, combinatorics, recursion, basic algebraic structures, and graph theory. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11034 | College Algebra <br> - Recommended Prerequisite: Algebra II | 10-12 | This course prepares students for eventual work in calculus by covering topics from Algebra and Analytic Geometry. Topics include the study of polynomial, logarithmic, exponential, and rational functions, and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; limits and continuity; the polar coordinate system; equations and graphs of conic sections; rotations and transformations; and parametric equations. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11035 | Algebra I Semester 1 | $\begin{gathered} 8 \\ \text { (See note) } \\ 9-12 \end{gathered}$ | The first part in a multi-part sequence of Algebra I. This course generally covers the same topics as the first semester of Algebra I, including the study of properties of rational numbers (i.e., number theory), ratio, proportion, and estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first degree equations and inequalities. <br> NOTE: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 11036 | Algebra I Semester 2 | 8 <br> (See note) <br> 9-12 | The second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving, and graphing first-degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics. <br> NOTE: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 11010-Mathematics - 5-12 |
| 11037 | Linear Algebra <br> - Recommended Prerequisite: Algebra II | 11-12 | Linear Algebra includes a study of matrices, vectors, tensors, and linear transformations and is typically intended for students who have attained pre-calculus objectives. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11038 | Linear Programming <br> - Recommended Prerequisite: Algebra II | 11-12 | Linear Programming includes a study of mathematical modeling and the simplex method to solve linear inequalities and is typically intended for students who have attained pre-calculus objectives. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11039 | Abstract Algebra <br> - Recommended Prerequisite: Algebra II | 11-12 | Abstract Algebra includes a study of the properties of the number system from an abstract perspective, including such topics as number fields (i.e., rational, real, and complex numbers), integral domains, rings, groups, polynomials, and the fundamental theorem of algebra. Abstract Algebra is typically geared towards students who have attained pre-calculus objectives. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11000-Mathematics - 5-12 |
| 11041 | Integrated Mathematics for Computer Science/Information Technology (Mathematics) <br> - Recommended Prerequisite: Algebra I and Computer Science Programming | 9-12 | This course is computer science with a major focus on math. Course topics are divided into six areas: sets, functions, and relations; basic logic; proof techniques; counting basics; graphs and trees; and discrete probability. Mathematical topics are interwoven with computer science applications to enhance the student's understanding of the introduced mathematics while students develop the ability to see computational problems from a mathematical perspective. Topics also include the study of properties and operations of the real number system, evaluating rational algebraic expressions, solving, and graphing first-degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratic equations. Algorithms in both mathematics and computer science contexts will be explored in depth. <br> Note: This course can be taught for Mathematics credit only. For Computer Science credit, Integrated Mathematics for Computer Science/Information Technology can be found under Computer Science. For Career and Technical Education credit, Integrated Mathematics for Computer Science/Information Technology can be found under Information Technology. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 11000-Mathematics <br> - 5-12 <br> AND <br> 23000-Computer Science <br> -5-12 |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11042 | Advanced JAVA Programming (Mathematics) | 9-12 | The Advanced JAVA Programming (Math) course will present concepts similarly covered by Advanced Placement Computer Science and is comparable to an introductory sequence of courses for computer science majors offered in college and university computer science departments. Students completing the course will be able to design and implement computer-based solutions to problems in several application areas; learn, organize, and process well-known algorithms and data structures; be able to develop and select appropriate algorithms and data structures to demonstrate problem-solving; design strategies and methodologies; analyze potential solutions, and understand the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem-solving and design using Java language, representing proven approaches for developing solutions that can scale up from small, simple problems to large, complex ones. Students will be able to code fluently in a well-structured fashion using the programming language JAVA and read and understand a large program and a description of the design and development process leading to such a program. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics -5-12 |
| 11051 | Integrated Mathematics | 9-12 | This course formalizes and extends middle school mathematics, deepening students' understanding of linear relationships. The course begins with a review of relationships between quantities, building from unit conversion to a study of expressions, equations, and inequalities. Students contrast linear and exponential relationships, including analyzing sequences and applications such as growth and decay. Students review one-two and multi-step equations, formally reasoning about each step using properties of equality. Students extend this reasoning to systems of linear equations. Students use descriptive statistics to analyze data before focusing on transformations and the relationship between Algebra and Geometry on the coordinate plane. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11052 | Integrated Mathematics <br> II <br> - Recommended Prerequisite: Integrated <br> Mathematics I or Algebra I | 9-12 | This course begins with a brief exploration of radicals and polynomials before delving into quadratic expressions, equations, and functions, including a derivation of the quadratic formula. Students then embark on a deep study of probability applications and develop advanced reasoning skills by analyzing similarity, congruence, and proofs of mathematical theorems. Students explore right triangles with an introduction to right triangle trigonometry before turning their attention to the geometry of circles and making informal arguments to derive formulas for the volumes of various solids. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11053 | Integrated Mathematics III <br> - Recommended Prerequisite: Integrated <br> Mathematics II or <br> Algebra I and <br> Geometry - 11120 | 9-12 | This course synthesizes previous mathematical learning in four focused areas of instruction. First, students relate visual displays and summary statistics to various data types and probability distributions, focusing on drawing conclusions from the data. Then, students begin an in-depth study of polynomial, rational, and radical functions, drawing on concepts of integers and number properties to understand polynomial operations and the combination of functions through operations. This section of instruction builds on the Fundamental Theorem of Algebra. Students then expand the study of right triangle trigonometry they began in Mathematics II to include non-right triangles and developing the Laws of Sines and Cosines. Finally, students model an array of real-world situations with all the types of functions they have studied, including work with logarithms to solve exponential equations. As they synthesize and generalize what they have learned about a variety of function families, students appreciate the usefulness and relevance of mathematics in the real world. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11061 | - Recommended Prerequisite: Precalculus or <br> Algebra II and Trigonometry and Geometry or Trigonometry/ Analytic Geometry | 11-12 | Calculus includes the study of derivatives, differentiation, integration, the definite and indefinite integral, and calculus applications. Typically, students have previously attained knowledge of pre-calculus topics (some combination of trigonometry, elementary functions, analytic geometry, and algebra). | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11111 | General Mathematics I | 9-12 | General Math reinforces and expands students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence, and similarity; angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11112 | Particular Topics in Foundation Math | 10-12 | This course examines particular topics in Foundation Math, such as arithmetic or basic conceptual skills, rather than providing a general overview. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics <br> - 5-12 |
| 11115 | Mathematics GED Equivalent | 9-12 | GED Equivalent Math is intended for students who earn the required credits for graduation by passing the math GED exam, as allowed by NDCC 15.1-21-02.2 (2) and NDCC 15.1-21-02.3 (2). This course is intended for students that are significantly behind in the required credits in math for graduation. This course can be used as either preparation to take the math GED exam for high school credit or to award high school credit upon completion of the math GED exam. This course CANNOT be used as preparation for a GED exam for purposes of obtaining a GED certificate. School board approval is required for schools to award credit for this course. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=3 \end{gathered}$ | License Code: 11010-Mathematics - 5-12 |
| 11118 | College Learning Lab Math 12 | 11-12 | College Learning Lab-Math prepares students for collegiate studies, specifically mathematics. The student will be engaged in educational experiences regarding mathematical methods for solving equations and word problems. The course will refresh students regarding equations, number systems, algebra, geometry, ratio, and analytical reasoning. <br> NOTE: This course code is designed to be used exclusively with the Pearson MyFoundationsLab platform through the CREAM programs. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics -5-12 |
| 11119 | Applied Geometry | 9-12 | Students will understand the basic facts and properties of points, lines, planes, parallel and perpendicular lines, triangles, polygons (with emphasis on quadrilaterals), circles, and three-dimensional figures. Problem-solving will involve using formulas such as distance, midpoint, slope, area, volume, the Pythagorean Theorem, and trigonometric ratios. Emphasis will be on connecting geometry to real-world situations to solve problems related to algebra, everyday life, navigation, architecture, and art. Concepts will be studied using tools such as a ruler, compass, protractor, calculator, and geometric software. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11120 | Geometry | 9-12 | Geometry, emphasizing an abstract, formal approach to the study of geometry, typically includes topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11121 | Analytic Geometry <br> - Recommended Prerequisite: Algebra II and Geometry | 11-12 | Analytic Geometry courses include the study of the nature and intersection of lines and planes in space, including vectors, the polar coordinate system, equations and graphs of conic sections, rotations and transformations, and parametric equations. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11122 | Informal Geometry | 10-12 | Informal Geometry emphasizes a practical approach to geometry study and deemphasizes an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11145 | Consumer Mathematics | 9-12 | Consumer Math reinforces general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and applies these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 11010-Mathematics - 5-12 |
| 11150 | Probability and Statistics <br> - Recommended Prerequisite: Algebra II | 11-12 | Probability and Statistics introduce the study of likely events and quantitative data analysis, interpretation, and presentation. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11160 | Trigonometry <br> - Recommended Prerequisite: Geometry and Algebra II | 10-12 | Trigonometry prepares students for eventual work in calculus and typically includes the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 11161 | Trigonometry/ Analytic Geometry <br> - Recommended Prerequisite: Geometry and Algebra II | 11-12 | This course prepares students for eventual work in calculus by covering Trigonometry and Analytic Geometry topics. Topics typically include the study of right trigonometric and circular functions, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; complex numbers; numerical tables; vectors; the polar coordinate system; equations and graphs of conic sections; rotations and transformations; and parametric equations. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11162 | Geometry/ <br> Trigonometry/ Advanced Algebra <br> - Recommended Prerequisite: Geometry and Algebra I | 11-12 | Geometry/Trigonometry/Advanced Algebra reviews and extends algebra and geometry concepts for students who have already taken Algebra I and Geometry. This course includes a review of such topics as properties and operations of real numbers; evaluation of rational algebraic expressions; solutions and graphs of first-degree equations and inequalities; translation of word problems into equations; operations with and factoring of polynomials; simple quadratics; properties of plane and solid figures; rules of congruence and similarity; coordinate geometry including lines, segments, and circles in the coordinate plane; and angle measurement in triangles including trigonometric ratios. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommend Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11170 | STEM Seminar (Math) | 9-12 | STEM Seminar provides students with a project-based, integrated, holistic experience with Science, Technology, Engineering, and Math. Taught by an interdisciplinary team of teachers, the course demonstrates the blurring of content areas when solving an authentic problem. It focuses on engaging students in hands-on, interdisciplinary application of the Engineering Design Process. Students engage in authentic projects, create products and presentations, and network with local STEM industry experts. 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 to be globally competitive in the $21^{\text {st }}$ Century. This course curriculum infuses educational content from Math, Science, Language Arts, and Social Studies. It utilizes state standards and technical skills and develops $21^{\text {st }}$ Century Skills such as communication, networking, collaboration, decisionmaking, creativity, and critical thinking. <br> Note: This course can be taught for Mathematics credit only. For Technology and Engineering credit, use STEM Seminar (Tech-Ed) under Technology and Engineering. For Science credit, use STEM Seminar (Science) under Science. <br> Note: Only one (1) credit of this course can be used towards the coordinated plan of study for the Academic and Career and Technical Education Scholarship. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 11010-Mathematics - 5-12 |
| 11181 | Precalculus <br> - Recommended Prerequisite: Algebra II and Geometry or <br> Geometry/ <br> Trigonometry/ <br> Advanced Algebra | 11-12 | Precalculus combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Algebra topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions and their relations, inverses, and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommend Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11190 | Applied Mathematics <br> - Recommended Prerequisite: General Mathematics | 9-12 | Applied Mathematics is designed to help students develop and refine job-related math skills. Units focus on arithmetic operations, problem-solving techniques, estimation of answers, measurement skills, algebra, geometry, data handling, statistics, and computers. Emphasis is on the ability to apply functional mathematics to solve problems in the world of work. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11191 | Occupationally Applied Math | 9-12 | Occupationally Applied Math reinforces general math skills, extends these skills to include some prealgebra and algebra topics, and uses these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 11579 | AP Precalculus <br> - Prerequisites: Algebra II and Geometry | 11-12 | The AP Precalculus course is equivalent to a one-semester, college precalculus course. This course will build upon the skills, and concepts students have learned in Algebra II. It will help prepare students for the skills and concepts needed for Calculus. The course focuses on polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and parameters, vectors, and matrices. The course analyzes scenarios, conditions, and data sets to determine and validate appropriate function models. It explores graphic, numeric, verbal, and analytical representations of problems. This course symbolically manipulates different function types in the coordinate system and builds functions reflecting changes in variables. See attached for a more detailed description of course content and prerequisite knowledge and skills. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics -5-12 |
| 11580 | Advanced Placement Statistics© <br> Recommended Prerequisite: Algebra II | 10-12 | The AP Statistics course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling, and experimentations, anticipating patterns, and statistical inference. Students use technology, investigations, problem-solving, and writing to build conceptual understanding. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommend Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11581 | Advanced Placement Calculus AB© <br> - Recommended Prerequisite: Algebra II | 10-12 | The AP Calculus AB is roughly equivalent to a first-semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally and to make connections among these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics - 5-12 |
| 11582 | Advanced Placement Calculus BC© <br> - Recommended Prerequisite: Algebra II | 10-12 | The AP Calculus BC is roughly equivalent to both first and secondsemester college calculus courses and extends the content learned in $A B$ to different types of equations and introduces the topic of sequences and series. The AP course covers differential and integral calculus topics, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally and to make connections among these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11010-Mathematics -5-12 |

## HIGH SCHOOL MATHEMATICS COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Mathematics require 120 contact hours per credit.

| Course Code | Course Name | Recommend Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 11583 | Advanced Placement Computer Science A© (Mathematics) <br> - Recommended Prerequisite: Algebra I and Computer Science Programming | 10-12 | AP Computer Science A is equivalent to a first-semester, collegelevel course in computer science. The course introduces students to computer science with fundamental topics that include problemsolving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both objectoriented and imperative problem-solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale from small, simple problems to large, complex ones. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. <br> Note: This course can be taught for Mathematics credit only. For Computer Science credit, Advanced Placement Computer Science A© can be found under Computer Science. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 11000-Mathematics <br> - 5-12 <br> AND <br> 23000-Computer Science -5-12 |

(Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB). Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

HIGH SCHOOL MILITARY SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Military Science require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15043 | Aerospace | 9-12 | Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth and outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds, and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics typically include the history of aviation, principles of aeronautical decision-making, airplane systems, aerodynamics, and flight theory. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 15044-Military Science <br> - 5-12 <br> OR <br> 13035-Earth Science <br> - 5-12 or 9-12 |
| 15044 | Junior Reserve Officers' Training Corps I (JROTC) | 9-12 | Introduction to Junior Reserve Officer Training Corps (ROTC) courses introduce students to the purposes and objectives of the Reserve Officer Training Corps program, which seeks to educate high school students in citizenship, promote community service, and instill responsibility. As part of that introduction, course topics typically include a brief history of the military branches in the United States and the basics of military drills, ceremonies, and rank structure. | $1 / 2$ or 1 <br> Max credit $=4$ | License Code: 15044-Military Science <br> - 5-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL PHYSICAL EDUCATION AND HEALTH COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Physical Education and Health require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08010 | Health (Phy Ed) | 9-12 | Topics covered within Health Education courses may vary widely but typically include personal health (nutrition, mental health, stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The course may include brief studies of environmental health, personal development, and/or community resources. <br> Note: This course can be taught for Physical Education credit only. For CTE credit, use Individual, and Family Health, found under Family and Consumer Sciences. For Science credit, use Health found under Science. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 08020-Health, Physical <br> Education \& Recreation <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08025-Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08027-Health \& Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 18015-Health <br> - K-8, 1-8, 5-12, or 9-12 |
| 08015 | Family Living (Phy Ed) | 10-12 | Family Living emphasizes building and maintaining healthy interpersonal relationships among family members and other members of society. This course often emphasizes (but is not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. It may also cover topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner. <br> Note: This course can be taught for Physical Education credit only. For CTE credit, use Family Living, found under Family and Consumer Science. | $1 / 4,1 / 2 \text {, or } 1$ $\text { Max credit = } 1$ | License Code: <br> 08020-Health, Physical <br> Education \& Recreation <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08025-Physical Education <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08027-Health \& Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |

## HIGH SCHOOL PHYSICAL EDUCATION AND HEALTH COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Physical Education and Health require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08020 | Substance Abuse Prevention (Phy Ed) | 9-12 | Substance Abuse Prevention course will focus specifically on the health risks of drugs, alcohol, and tobacco. This course will provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them. <br> Note: This course is taught for Physical Education credit only. For Health credit, use Substance Abuse Prevention (Health) found under Health. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 08030 | General Physical Education | 9-12 | Physical Education provides students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=4$ | License Code: 08020-Health, Physical |
| 08031 | Adaptive Physical Education | 9-12 | This course provides physical education activities (sports, fitness, and conditioning) adapted for students with special needs. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ | Education \& Recreation <br> -K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 08032 | Swimming and Water Safety | 9-12 | Swimming and Water Safety help students develop skills useful or necessary in an aquatic environment. Activities may focus on swimming, competitive strokes, such as freestyle, breaststroke, butterfly, and so on, or team-oriented water sports, such as water polo and relay swimming. This course may also include (or concentrate exclusively on) diving and/or lifesaving skills. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | OR <br> 08025-Physical Education <br> -K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 08027-Health \& Physical |
| 08034 | Dance I (Phy Ed) | 9-12 | Dance I (Phy Ed) provides students with experience in one or several dance forms (i.e., modern, jazz, ballet, and tap). Initial classes are usually introductory in nature, while the more advanced classes concentrate on improving students' technique and may offer or require experience in choreography and dance evaluation. <br> Note: This course is taught for Physical Education credit only. For Fine and Performing Arts credit, use Dance I (Fine Arts) under Fine and Performing Arts. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=4$ | - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 08035 | Dance II (Phy Ed) | 10-12 | Dance II (Phy Ed) allows students with prior dance experience to improve techniques, experience choreography, and emphasize performance. <br> Note: This course is taught for Physical Education credit only. For Fine and Performing Arts credit, use Dance II (Fine Arts) under Fine and Performing Arts. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=3$ |  |

## HIGH SCHOOL PHYSICAL EDUCATION AND HEALTH COURSE CODES

 GRADES 9-12High school (grades 9-12) courses in Physical Education and Health require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08036 | Individual and Dual Sports | 9-12 | Individual/Dual Sports provides students with the knowledge, experience, and opportunity to develop skills in more than one individual or dual sport (such as tennis, golf, badminton, jogging/running, racquetball, and so on). | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 08020-Health, Physical <br> Education \& Recreation <br> - K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 08025-Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08027-Health \& Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 08038 | Gymnastics | 9-12 | Gymnastics is designed to help students develop knowledge and skills in gymnastics, stunts, and tumbling while emphasizing safety. Floor gymnastics may be supplemented using gymnastic equipment such as balance beams, uneven bars, parallel bars, rings, and so on. Gymnastics may include other components, such as the history of gymnastics and conditioning. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 08040 | Weight Training | 9-12 | Weight Training helps students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 08041 | Specific Sports Physical Education | 10-12 | Courses in Specific Sports Activities help students develop knowledge, experience, and skills in a single sport or activity (such as basketball, volleyball, track, and field, football, etc.). <br> Note: This course may be designed for athletes during a season. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 08042 | Physical Education Equivalent | 9-12 | This course awards physical education credit for other at-school activities, such as marching band or cheerleading. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=4 \end{gathered}$ |  |
| 08043 | Lifetime Fitness Education | 9-12 | Lifetime Fitness Education emphasizes acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 08044 | Fitness/Conditioning Activities | 9-12 | Fitness/Conditioning Activities emphasizes conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 08045 | Introduction to Coaching | 9-12 | Introduction to Coaching focuses on the various responsibilities of a coach and the skills needed to fill this important position successfully. Throughout the course, students will explore various coaching models and leadership styles, sports nutrition, sports psychology, and safety in conditioning and cross-training. Students will learn effective communication, problem-solving, and decision-making skills. This course will also introduce students to game strategy, tactical strategy, skills-based training, and coaching ethics. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL PHYSICAL EDUCATION AND HEALTH COURSE CODES <br> GRADES 9-12

High school (grades 9-12) courses in Physical Education and Health require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 08046 | Sports Officiating | 9-12 | In Sports Officiating, students will learn the rules, gameplay, and guidelines for various sports, including soccer, baseball, softball, basketball, volleyball, football, and tennis. In addition, they will learn the officiating calls and hand signals for each sport and the role a sports official plays in maintaining fair play. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: <br> 08020-Health, Physical <br> Education \& Recreation <br> - K-8, K-12, 1-8, 1-12, 5-12, <br> or 9-12 <br> OR <br> 08025-Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 <br> OR <br> 08027-Health \& Physical Education <br> - K-8, K-12, 1-8, 1-12, 5-12, or 9-12 |
| 08051 | Sports Physiology | 9-12 | Sports Physiology examines human anatomy and physiology as they pertain to human movement and physical performance in sports activities. This course may also emphasize the prevention and treatment of athletic injuries. <br> Note: This course can be taught for Physical Education credit only. For Science credit, use Physiology, found under Science. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ |  |
| 08052 | Human Anatomy (Phy Ed) | 10-12 | Human Anatomy (Phy Ed) presents an in-depth study of the human body and biological system. Students study anatomical terminology, cells, and tissues and typically explore functional systems such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems. <br> Note: This course can be taught for Physical Education credit only. For Science credit, use Human Anatomy (Science) found under Science. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 18010 | Health | 9-12 | Interpersonal relationships, mental health, chemical usage, consumer and environmental health, family life and relationships, nutrition, control of diseases, and healthy decision-making skills. <br> Note: This course can be taught for Health credit only. Use Individual and Family Health found under Family and Consumer Science for CTE credit. For Physical Education credit, use Health found under Physical Education and Health. For Science credit, use Health found under Science. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 18015-Health <br> - K-8, 1-8, 5-12, or 9-12 |
| 18015 | Family Living (Health) | 10-12 | Human behavior, self-philosophy of life, religion, love versus infatuation, courtship, human sexuality, preparation for marriage, marriage, family life cycle, family crisis, the family in other cultures, and the family's future. Development and problems of the adult and the family unit, including love, sexuality, and marriage. <br> Note: This course can be taught for Health credit only. Use Family Living, found under Family and Consumer Science, for CTE credit. For Physical Education credit, use Family Living, found under Physical Education and Health. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

December 7, 2022

## HIGH SCHOOL PHYSICAL EDUCATION AND HEALTH COURSE CODES GRADES 9-12

High school (grades 9-12) courses in Physical Education and Health require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 18020 | Substance Abuse Prevention (Health) | 9-12 | The substance Abuse Prevention course will focus specifically on the health risks of drugs, alcohol, and tobacco. This course will provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them. <br> Note: This course is taught for Health credit only. For Physical Education credit, use Substance Abuse Prevention (Phy Ed) found under Physical Education and Health. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 18051 | Physiology (Health) | 9-12 | To provide students with detailed information about the human body. A study of the function of living organisms and their parts. The functions of the human body beyond those already covered in biology. <br> Note: This course is taught for Health credit only. For Physical Education credit, use Sports Physiology, found under Physical Education and Health. For Science credit, use Physiology, found under Science. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 18015-Health <br> - K-8, 1-8, 5-12, or 9-12 |
| 18052 | Human Anatomy (Health) | 10-12 | An introduction to providing an advanced study of the structure of the human body. <br> Note: This course is taught for Health credit only. For Physical Education, use Human Anatomy (Phy Ed) found under Physical Education and Health. For Science credit, use Human Anatomy (Science) found under Science. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.


## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13020 | Biology | 9-12 | Biology is designed to provide information regarding the fundamental concepts of life and life processes. This course includes (but is not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 13021 | Human Anatomy (Science) <br> - Recommended Prerequisite: Biology | 10-12 | Human Anatomy (Science) presents an in-depth study of the human body and biological system. Students study anatomical terminology, cells, and tissues and typically explore functional systems, such as skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems. <br> Note: This course can be taught for Science credit only. For Physical Education credit, the Human Anatomy (Phy. Ed.) can be found under Physical Education. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 13022 | Physiology <br> - Recommended Prerequisite: Biology | 10-12 | Physiology examines all major systems, tissues, and muscle groups in the human body to help students understand how these systems interact and their role in maintaining homeostasis. This course may also cover cell structure and function, metabolism, and the human life cycle. <br> Note: This course can be taught for Science credit only. For Physical Education credit, Sports Physiology can be found under Physical Education and Health. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13010-Biology - 5-12 or 9-12 |
| 13023 | Health | 9-12 | Topics covered within Health Education courses may vary widely but typically include personal health (nutrition, mental health, stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The course may include brief studies of environmental health, personal development, and/or community resources. <br> Note: This course can be taught for Science credit only. For CTE credit, Health (Individual and Family Health) can be found under Family and Consumer Science. For Physical Education credit, Health can be found under Physical Education and Health. This course may also satisfy the health requirement for graduation. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13024 | Botany/Horticultural Science I | 9-12 | This course prepares students to produce greenhouse/ nursery plants and to maintain plant growth and propagation structures. Topics include soils, plants, plant identification, and plant entomology. Courses examine the importance of plant cell structures, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers, and reproduction of plants. Students may be introduced to the biological, environmental, conservation, and ecological concepts encountered in our environment. 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. This course will reinforce and extend students' understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Leadership development and supervised agricultural experience programs are also integral to this course. <br> Note: This course can be taught for Science credit only. Botany/Horticultural Science I can be found under Agricultural Education for CTE credit. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: |
| 13025 | Botany/Horticultural Science II | 9-12 | This course prepares students to produce greenhouse/nursery plants and to maintain plant growth and propagation structures. Topics include soils, plants, plant identification, and plant entomology. Courses examine the importance of plant cell structures, functions of cells, plant processes, nonvascular plants, vascular plants, roots, stems, leaves, flowers, and reproduction of plants. Students may be introduced to the biological, environmental, conservation, and ecological concepts encountered in our environment. 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. This course will reinforce and extend students' understanding of science by associating basic scientific principles and concepts with relevant applications in agriculture. Leadership development and supervised agricultural experience programs are also integral to this course. <br> Note: This course can be taught for Science credit only. For CTE credit, Botany/Horticultural Science II can be found under Agricultural Education. | $1 / 2$ or 1 <br> Max credit $=1$ | 5-12 or 9-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13026 | Ornithology | 9-12 | In Ornithology, students will discover the world of birds. Topics include flight, structure, evolution, classification, behavior, habitat, and conservation. <br> Note: This course may not be substituted for the biology course required for graduation. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 13027 | Entomology | 9-12 | Entomology is a basic, non-technical introduction to the study of insects and the ways they live. Course topics include insect importance, life cycles, classification, anatomy and physiology, behavior, and medical entomology. <br> Note: This course may not be substituted for the biology course required for graduation. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 13028 | Real World Biology | 9-12 | Real World Biology is a lab course designed around real-world issues that can be explored by integrating biology and mathematics. Students will apply tools acquired in previous math and biology classes to relevant and engaging problems. Students will derive solutions in population growth, ecology, genetics, epidemiology, and forensics through mathematical models and sound reasoning. This course will adhere to state biology standards. <br> Note: This course may not be substituted for the biology course required for graduation. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13010-Biology <br> - $5-12$ or $9-12$ |
| 13029 | Advanced Biology <br> - Recommended Prerequisite: Biology, Chemistry, and appropriate mathematics | 10-12 | Usually taken after a comprehensive initial study of biology, Advanced Biology covers biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 13030 | Physical Science | $\begin{gathered} 8 \\ \text { (see note) } \\ 9-12 \end{gathered}$ | Physical Science involves the study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions. <br> NOTE: This course code should only be used for MISO3 reporting purposes when a grade 8 student receives high school credit. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13045-Physical Science - 5-12 or 9-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13031 | Chemistry | 9-12 | Chemistry involves studying the composition, properties, and reactions of substances. This course typically explores such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13020-Chemistry - 5-12 or 9-12 |
| 13032 | Advanced Chemistry <br> - Recommended Prerequisite: Chemistry | 10-12 | Usually taken after a comprehensive initial study of chemistry, Advanced Chemistry covers chemical properties and interactions in more detail. Advanced Chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 13034 | Applied Biology/Chemistry | 9-12 | Applied Biology/Chemistry integrates biology and chemistry into a unified domain of study. It presents the resulting body of knowledge in the context of work, home, society, and the environment, emphasizing field and laboratory activities. Topics include natural resources, water, air, and other gases; nutrition, disease, and wellness; plant growth and reproduction; life processes, microorganisms, and synthetic materials; waste and waste management; and the community of life. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 13010-Biology <br> - 5-12 or 9-12 OR <br> 13020-Chemistry <br> - 5-12 or 9-12 |
| 13036 | Forensic Science <br> - Recommended Prerequisite: <br> Biology, Physical Science, or Departmental Approval | 11-12 | Students will learn the methodology to evaluate a crime scene, the proper lab mechanics required to evaluate evidence, and how to compare the known and unknown. Topics may include the history of forensic science, collecting of evidence, analyzing results, and hands-on application of many laboratory techniques used in solving crimes. Emphasis would be placed on applying the scientific method to life-long skills and problem-solving. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13036-Forensic Science <br> - 10-12 |
| 13042 | Physics | 9-12 | Physics involves the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes an examination of sound, light, and magnetic and electric phenomena. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13050-Physics <br> - 5-12 or 9-12 |
| 13044 | Applied Physics | 9-12 | Applied Physics introduces students to mechanical, fluid, electrical, and thermal principles and systems on which modern equipment operates. Student activities examine the similarities of force, work, rate, resistance, energy, power, and force transformers in mechanical, fluid, electrical, and thermal systems. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13045 | Principles of Technology | 10-12 | Principles of Technology focus on studying the forces and laws of nature and their application to modern technology. Equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena are presented in the context of current, realworld applications. Demonstrations, math labs, and applied laboratory experiments are integral to the Principles of Technology curriculum. This course gives students a solid foundation for careers in electronics, robotics, telecommunications, and other technological fields. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13050-Physics <br> - 5-12 or 9-12 |
| 13052 | Biotechnology | 9-12 | Students will explore the history of biotechnology, including early attempts at food preservation, the development of antibiotics, and changes to food crops worldwide. They will learn about some of the challenges of biotechnology, such as the growth of antibioticresistant bacteria and questions about the safety of commercially produced genetically modified organisms (GMOs). They will also research new biotechnologies and how they are changing the world we live in. | $\begin{gathered} 1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13010-Biology <br> - 5-12 or 9-12 |
| 13061 | Astronomy | 9-12 | Astronomy allows students to study the solar system, stars, galaxies, and interstellar bodies. This course usually introduces and uses astronomic instruments and typically explores theories regarding the origin and evolution of the universe, space, and time. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 13035-Earth Science - 5-12 or 9-12 |
| 13062 | Geology | 9-12 | Geology provides an in-depth study of the forces that formed and continue to affect the earth's surface. Earthquakes, volcanoes, and erosion are examples of topics that are presented. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 13063 | Earth Science (Secondary) | 9-12 | Earth Science offers insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, this course usually explores oceanography, geology, astronomy, meteorology, and geography. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 13064 | Meteorology | 9-12 | Meteorology examines the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes, and weather forecasting. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 13065 | Environmental Science <br> - Recommended Prerequisite: Biology, Physical Science, or Departmental Approval | 11-12 | Environmental Science examines the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, this course usually covers the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 13025-Environmental Science <br> - 10-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13074 | Oceanography | 9-12 | Oceanography focuses on the content, features, and possibilities of the earth's oceans. It explores marine organisms, conditions, and ecology and sometimes covers marine mining, farming, and exploration. | $1 / 4 \text { or } 1 / 2$ <br> Max credit $=1 / 2$ | License Code: 13035-Earth Science - 5-12 or 9-12 |
| 13099 | Science GED Equivalent | 9-12 | GED Equivalent Science is intended for students who earn the required credits for graduation by passing the science GED exam, as allowed by NDCC 15.1-21-02.2 (2) and NDCC 15.1-21-02.3 (2). This course is intended for students significantly behind in the required credits in science for graduation. This course can be used as either preparation to take the science GED exam for high school credit or to award high school credit upon completion of the science GED exam. This course CANNOT be used as preparation for a GED exam for purposes of obtaining a GED certificate. School board approval is required for schools to award credit for this course. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=3 \end{gathered}$ | License Code: <br> 13047 Composite Science <br> - 5-12 or 9-12 OR <br> 13010 Biology <br> - 5-12 or 9-12 OR <br> 13035 Earth Science <br> - 5-12 or 9-12 OR <br> 13020 Chemistry <br> - 5-12 or 9-12 OR <br> 13045 Physical Science <br> - 5-12 or 9-12 OR <br> 13050 Physics <br> - 5-12 or 9-12 OR <br> 13025 Environmental <br> - 5-12 or 9-12 OR <br> 13036 Forensic <br> - 5-12 or 9-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13110 | Ecology | 9-12 | Ecology provides students with a basic understanding of living things. Topics covered may include ecology and environmental problems such as overpopulation and pollution, as well as cells, types of organisms, evolutionary behavior, and inheritance. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 13010-Biology <br> - 5-12 or 9-12 |
| 13150 | STEM Seminar (Science) | 9-12 | STEM Seminar provides students with a project-based, integrated, holistic experience with Science, Technology, Engineering, and Math. Taught by an interdisciplinary team of teachers, the course demonstrates the blurring of content areas when solving an authentic problem. It focuses on engaging students in hands-on, interdisciplinary application of the Engineering Design Process. Students engage in authentic projects, create products and presentations, and network with local STEM industry experts. 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 to be globally competitive in the $21^{\text {st }}$ Century. This course curriculum infuses academic content from Math, Science, Language Arts, and Social Studies. It utilizes state standards and technical skills and develops $21^{\text {st }}$ Century Skills such as communication, networking, collaboration, decisionmaking, creativity, and critical thinking. <br> Note: This course can be taught for Science credit only. For Mathematics credit, use STEM Seminar (Math) under Mathematics. For Technology and Engineering credit, use STEM Seminar (Tech-Ed) under Technology and Engineering. <br> Note: Only one (1) credit of this course can be used towards the coordinated plan of study for the Academic and Career and Technical Education Scholarship. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: Any Science degree 5-12 or 9-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13580 | Advanced Placement Biology© | 10-12 | The course is based on four Big Ideas, encompassing core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about living organisms and biological systems. Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Focusing on these disciplinary practices enables teachers to use the principles of scientific inquiry to promote a more engaging and rigorous experience for AP Biology students. Twenty-five percent of instructional time is devoted to hands-on laboratory work emphasizing inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their process. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13010-Biology <br> - 5-12 or 9-12 |
| 13581 | Advanced Placement Chemistry© | 10-12 | The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquirybased investigations as they explore topics such as atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. This course requires 25 percent of the instructional time to allow students to engage in laboratory investigations. This includes a minimum of 16 hands-on labs, at least six of which are inquiry-based. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13020-Chemistry - 5-12 or 9-12 |
| 13582 | Advanced Placement Environmental Science | 10-12 | The AP Environmental Science course is designed to be the equivalent of a one-semester introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires students to identify and analyze natural and human-made environmental problems, evaluate their relative risks, and examine alternative solutions for resolving or preventing them. This course is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Although no specific AP Environmental Science labs or field investigations are required for the course, students are expected to perform as many labs/field investigations as possible. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 13025-Environmental Science <br> - 10-12 |

## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.


## HIGH SCHOOL SCIENCE COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Science require 150 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 13586 | Advanced Placement Physics 1: AlgebraBased | 10-12 | AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion), work, energy, and power; mechanical waves and sound; and introductory, simple circuits. This course requires 25 percent of the instructional time to be spent in hands-on laboratory work, emphasizing inquiry-based investigations that provide students with opportunities to apply science practices. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 13587 | Advanced Placement Physics 2: AlgebraBased | 10-12 | AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits and capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. This course requires 25 percent of the instructional time to be spent in hands-on laboratory work, emphasizing inquiry-based investigations that provide students with opportunities to apply science practices. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 13050-Physics <br> - 5-12 or 9-12 | of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)

** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

## HIGH SCHOOL SOCIAL STUDIES COURSE CODES

 GRADES 9-12High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 06815 | Tribal History | 9-12 | This course is a general overview of American Indian tribes throughout the United States. It will include the study of locations, origins, selected events, artifacts, ideas, or other phenomena associated with the history of the tribes. Emphasis will be placed on the examination of the tribal nations of North Dakota. | $1 / 4,1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 15046-Native American Studies <br> - K-12, 1-12, 5-12, or 9-12 <br> OR <br> 15035-Composite Social Studies <br> - 5-12 or 9-12 |
| 06816 | Tribal Government | 9-12 | This course provides an analytical description of tribal governments and their legal, social, and political structure. Emphasis will be placed on the examination of the tribal governments of North Dakota. | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 06817 | Tribal Studies | 9-12 | This course is a general overview course that explores the social dynamics of native American tribes with emphasis on the tribal nations of North Dakota (Lakota/Dakota, Hidatsa, Mandan, Arikara, and Ojibwa). It will include a study of the ways of life they create to adapt and cope with the environmental, political, social, and economic statuses and changes. It will also include studying language components, their origins, and contemporary issues facing native American Indian people across the United States and North Dakota. <br> Note: It is recommended that this course be taught by a licensed eminent scholar (license code 15046). | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 06818 | Tribal Culture | 9-12 | This course explores the differences and similarities of various tribes' cultural values. Topics include kinship systems, rites and rituals, ceremonies, worldviews based on origin, and philosophical beliefs. | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 15010 | Anthropology | 9-12 | Anthropology introduces students to the study of human evolution about the origin, distribution, physical attributes, environment, and culture of human beings. This course provides an overview of anthropology, including but not limited to both physical and cultural anthropology. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15020-History <br> - 5-12 or 9-12 |
| 15011 | Humanities (Social Studies) | 10-12 | Humanities (Social Studies) provides an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. This course may also cover the languages and political institutions of these cultures. <br> Note: This course can be taught for Social Studies credit only. For English credit, use Humanities (English) under English. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max } \text { credit }=1 \end{gathered}$ | License Code: 15020-History 5-12 or 9-12 |
| 15012 | Archeology | 9-12 | Archeology is the systematic study of past human life and culture by the recovery and examination of remaining material evidence, such as graves, buildings, tools, and pottery. Archaeological investigations are a principal source of modern knowledge of prehistoric, ancient, and extinct cultures. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 15020-History <br> - 5-12 or 9-12 |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15020 | World Areas Studies | 9-12 | World Area Studies examines the history, politics, economics, society, and/or culture of one or more regions, such as Africa, Latin America, the former Soviet Union, Far East Asia, and the Middle East. This course may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, this course may emphasize one particular country (other than the United States) rather than emphasizing a region or continent. | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15007-Government <br> - 5-12 or 9-12 OR 15010-Economics <br> - 5-12 or 9-12 OR |
| 15021 | World People Studies | 9-12 | World People Studies courses allow students to study various subgroups with something in common such as religion, gender, or culture. Similar to World Area Studies but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture. | $1 / 4,1 / 2$ or 1 <br> Max credit $=1$ | - 5-12 or 9-12 OR <br> 15020-History <br> - 5-12 or 9-12 OR 15035-Composite Social Studies <br> - 5-12 or 9-12 |
| 15030 | Citizenship |  | Citizenship examines the general structure and functions of American government systems, the roles and responsibilities of citizens to participate in the political process, and the individual's relationship to the law and legal system. This course does not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as comprehensive courses in the U.S. Government. | $1 / 4 \text { or } 1 / 2$ <br> Max credit $=1 / 2$ | License Code: 15007-Government - 5-12 or 9-12 |
| 15040 | Social Studies GED Equivalent | 9-12 | GED Equivalent Social Studies is intended for students who earn the required credits for graduation by passing the science GED exam, as allowed by NDCC 15.1-21-02.2 (2) and NDCC 15.1-21-02.3 (2). This course is intended for students significantly behind in the required credits in social studies for graduation. This course can be used as either preparation to take the social studies GED exam for high school credit or to award high school credit upon completion of the social studies GED exam. This course CAN NOT be used to prepare for a GED exam for obtaining a GED certificate. School board approval is required for schools to award credit for this course. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=3$ | License Code: <br> 15007-Government <br> - 5-12 or 9-12 OR <br> 15010-Economics <br> - 5-12 or 9-12 OR <br> 15015-Geography <br> - 5-12 or 9-12 OR <br> 15020-History <br> - 5-12 or 9-12 OR <br> 15030-Psychology <br> - 5-12 or 9-12 OR <br> 15035-Composite <br> Social Studies <br> - 5-12 or 9-12 <br> 15040-Sociology <br> - 5-12 or 9-12 |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15050 | Consumer Education | 9-12 | Choosing careers, choice of school versus careers, budgeting, background on taxes, insurance, credit buying, installment loans, and personal expenditure. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15010-Economics <br> - 5-12 or 9-12 |
| 15060 | Economics | 9-12 | Economics is the study of economic principles and their application. This may include types of business ownership, theory of the free enterprise system, general economic principles, the role of the government, cooperative marketing, economic terms and definitions, world conditions, and how they affect the American Free Enterprise Systems. <br> If the state-mandated Personal Finance concepts are not offered to all students in another course, then these concepts must be included in the Economics curriculum. | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ | License Code: 15010-Economics <br> - 5-12 or 9-12 |
| 15069 | Cooperative Marketing | 9-12 | Cooperative Marketing offers students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a significant emphasis is often placed on kinds of markets; market identification; product planning, packaging, and pricing; and business management. | $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 15010-Economics 5-12 or 9-12 |
| 15070 | Geography | 9-12 | Geography provides students with an overview of world geography but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: 15015-Geography <br> - 5-12 or 9-12 |
| 15083 | Women: Past \& Present | 9-12 | Women: Past \& Present examines the history, politics, economics, and/or culture of gender in U.S. society. This course may focus primarily on gender relations or take a more comprehensive approach to studying contemporary issues related to gender. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | License Code: 15020-History <br> - 5-12 or 9-12 |
|  |  |  |  |  |  |
| 15085 | U.S. History | 9-12 | U.S. History provides students with an overview of the history of the United States, examining periods from discovery or colonialism through World War II or after. This course typically includes a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement. This course must include Native American tribal history instruction, as cited in NDCC 15.1-21-02. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15086 | Early U.S. History | 10 | Early U.S. History provides students with an overview of the United States, examining periods from the 1830s-1930s. This course will allow for more inquiry into the content, opportunities for personalized learning, and technology integration. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 15020-History <br> - 5-12 or 9-12 OR <br> 15035-Composite Social Studies <br> - 5-12 or 9-12 |
| 15087 | Modern U.S. History | 11 | Early U.S. History provides students with an overview of the United States, examining periods from the 1930's-Present. This course will allow for more inquiry into the content, opportunities for personalized learning, and technology integration. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15020-History <br> - 5-12 or 9-12 OR <br> 15035-Composite Social Studies 5-12 or 9-12 |
| 15089 | World History | 9-12 | World History provides students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History may include geographical studies, but often these components are not as explicitly taught as geography. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15020-History - 5-12 or 9-12 |
| 15110 | Political Science | 9-12 | Political Science approaches the study of politics from a theoretical perspective, including examining the role of government and the nature of political behavior, political power, and political action. | $\begin{gathered} 1 / 4 \text { or } 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 15111 | American Government | 9-12 | American Government provides an overview of the structure and functions of the U.S. government and political institutions. It examines constitutional principles, the concepts of rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. This course may examine state and local governments' structure and function and cover certain economic and legal topics. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15007-Government <br> - 5-12 or 9-12 |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15114 | International Relations | 9-12 | International Relations provides students with an introduction to the relationships among nations, including an examination of the modern state; the foreign policies of nations; the dynamics of nationalism, ideology, and culture; and the role of international organizations. The course may also emphasize contemporary events. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 15007-Government <br> - 5-12 or 9-12 |
| 15118 | Law \& Justice in North Dakota | 9-12 | Law \& Justice courses examine the workings of the U.S. criminal and civil justice systems, including understanding civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although this course emphasizes the legal process, it may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminal justice system. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 15120 | Psychology | 9-12 | Psychology introduces students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of psychology, topics in human growth and development, personality and behavior, and abnormal psychology. | $\begin{gathered} 1 / 4,1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15030-Psychology <br> - 5-12 or 9-12 |
| 15130 | Sociology | 9-12 | Sociology introduces students to the study of human behavior in society. This course provides an overview of sociology, generally including (but not limited to) social institutions and norms, socialization and social change, and the relationships among individuals and groups in society. | $1 / 4,1 / 2 \text { or } 1$ <br> Max credit $=1$ | License Code: 15040-Sociology - 5-12 or 9-12 |
| 15131 | Particular Topics in Sociology | 9-12 | This course examines a particular topic(s) in sociology, such as culture and society or the individual in society, rather than providing an overview of the field of sociology. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 15040-Sociology - |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15201 | Problems of Democracy | 9-12 | Principles of Democracy combine a study of the structure of national, state, and local U.S. government with an overview of the principles of market economics. Course content may include contemporary U.S. issues. This course aims to prepare students to perform effectively as informed citizens. Students must read the Declaration of Independence, the United States Constitution, and the Bill of Rights. <br> If the state-mandated Personal Finance concepts are not offered to all students in another course, then these concepts must be included in the Problems of Democracy curriculum. | $\begin{gathered} 1 / 4,1 / 2, \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 15007-Government <br> - 5-12 or 9-12 OR <br> 15010-Economics <br> - 5-12 or 9-12 OR <br> 15015-Geography <br> - 5-12 or 9-12 OR <br> 15020-History <br> - 5-12 or 9-12 OR <br> 15035-Composite Social Studies <br> - 5-12 or 9-12 |
| 15251 | Orientation to Social Science | 9-12 | Social Science provides students with an introduction to the various disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Typically, this course emphasizes the methodologies of the social sciences and the differences among the various disciplines. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 15007-Government <br> - 5-12 or 9-12 OR 15035-Composite Social Studies - 5-12 or 9-12 |
| 15301 | Marriage \& the Family | 9-12 | The sociological, legal, psychological, and religious views of marriage and family relationships, responsibilities and roles of each member, and function of the family in our society. <br> Note: This course can be taught for Social Studies credit only. For CTE credit, see course 09122 Family Living and 09120 Parenting under Family \& Consumer Science. For Physical Education credit, see course 08015 Family Living under Physical Education. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ | License Code: 15040-Sociology <br> - 5-12 or 9-12 |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15401 | North Dakota Studies | 9-12 | North Dakota Studies courses examine the history, politics, economics, society, and/or cultures of the state in the United States. This course may focus primarily on the history of this state or may take an interdisciplinary approach to the contemporary issues affecting it. | $1 / 4,1 / 2 \text {, or } 1$ <br> Max credit $=1$ | License Code: <br> 15007-Government <br> - 5-12 or 9-12 OR <br> 15015-Geography <br> - 5-12 or 9-12 OR <br> 15020-History <br> - 5-12 or 9-12 OR <br> 15035-Composite Social Studies <br> - 5-12 or 9-12 |
| 15402 | State Studies | 9-12 | This code is to be used for students transferring into the State of North Dakota with preexisting state studies credits that are not mapped or aligned to the existing course codes. For the transcript, please name the state for which credit is given (i.e., South Dakota Studies). | $1 / 4,1 / 2$, or 1 <br> Max credit $=1$ | N/A - used for courses that are being transferred in |
| 15580 | Advanced Placement Macroeconomics® | 10-12 | AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system. The course emphasizes the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. <br> If the state-mandated Personal Finance concepts are not offered to all students in another course, then these concepts must be included in the Economics curriculum. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15010-Economics <br> - 5-12 or 9-12 |
| 15581 | Advanced Placement Microeconomics® | 10-12 | AP Microeconomics is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. <br> If the state-mandated Personal Finance concepts are not offered to all students in another course, then these concepts must be included in the Economics curriculum. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15010-Economics - 5-12 or 9-12 |

HIGH SCHOOL SOCIAL STUDIES COURSE CODES GRADES 9-12
High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15582 | Advanced Placement Comparative Government \& Politics© | 10-12 | AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structure; policies; and political, economic, and social challenges among six selected countries: Great Britain, Mexico, Russia, Iran, China, and Nigeria. Additionally, students examine how different governments solve similar problems by comparing the effectiveness of approaches to many global issues. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15007-Government - 5-12 or 9-12 |
| 15583 | Advanced Placement United States Government \& Politics© | 10-12 | AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess the causes and consequences of political events, and interpret data to develop evidence-based arguments. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 15584 | Advanced Placement European History© | 10-12 | AP European History focuses on developing students' understanding of European history from approximately 1450 to the present. Students investigate the content of European history for significant events, individuals, developments, and processes in four historical periods and develop and use the same thinking skills and methods (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation) employed by historians. The course also provides five themes that students explore to make connections among historical developments in different times and places. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15020-History - 5-12 or 9-12 |
| 15585 | Advanced Placement United States History© | 10-12 | AP U.S. History focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of student's abilities to think conceptually about U.S. history from approximately 1491 to the present. Seven themes of equal importance provide areas of historical inquiry for investigation throughout the course. These require students to reason historically about continuity and change over time and compare various historical developments in different times and places. The course also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth. This course must include Native American tribal history instruction, as cited in NDCC 15.1-21-02. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15020-History <br> - 5-12 or 9-12 |

## HIGH SCHOOL SOCIAL STUDIES COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Social Studies require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15587 | Advanced Placement Human Geography© | 10-12 | The AP Human Geography course is equivalent to an introductory collegelevel course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organizations and their environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15015-Geography <br> - 5-12 or 9-12 |
| 15587 | Advanced Placement Human Geography© | 10-12 | The AP Human Geography course is equivalent to an introductory collegelevel course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organizations and their environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012). | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15015-Geography <br> - 5-12 or 9-12 |
| 15588 | Advanced Placement Psychology© | 10-12 | The AP Psychology course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena. Throughout the course, students employ psychological research methods, including ethical considerations, using the scientific method, analyzing bias, evaluating claims and evidence, and effectively communicating ideas. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 15030-Psychology <br> - 5-12 or 9-12 |
|  | USE ONLY FOR SUMMER SCHOOL PROGRAM |  |  |  |  |
| 15600 | ND Boys and Girls State Leadership Academy | 11 | The ND Boys and Girls State Leadership Academy is an intensive weeklong program centered on developing and implementing local, county, and statewide civics programs. The immersion of ND boys and girls into this program is designed to provide a hands-on approach to selecting and electing officials at all levels of a mock government, including a Governor. In addition to the election, delegates write and present mock legislation based on current issues important to today's society. Over fifty hours of intense instruction and a collaborative networking experience are provided to the state's youth during their week of civic education and leadership. | $1 / 4$ or $1 / 2$ <br> Max credit $=1 / 2$ |  |

* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10091 | Individual Technical Problems | 11-12 | To provide a course for schools that cannot offer other specified course titles. Experiences in communication technology, production technology, and energy utilization are to be identified and developed on a contractual basis by the student and approved by the instructor. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 10093 | Applying Technology | 9-12 | This activity-based course addresses all 20 Standards for Technological Literacy using a modular classroom environment. | $1 / 2$ or 1 <br> Max credit $=2$ |  |
| 10094 | Foundations of Technology | 9-12 | Foundations of Technology increases students' capability by using their unique skills to innovate, improvise, and invent. Students develop an understanding of engineering design, transforming ideas into products or systems. They select and use manufacturing, construction, energy, and power technologies to understand quality goods, the impact of structures, and the importance of energy resources. Students also gain insights into communication technologies, telemedicine, and other medical technologies. The course concludes with synthesizing major ideas through an understanding of the impact of technology on society and the environment. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10005-Industrial Arts <br> - 5-12 or 9-12 OR <br> 10007-Technology Education <br> - 5-12 or 9-12 OR <br> 10010-Industrial Technology <br> - 5-12 or 9-12 |
| 10096 | Technology and Society | 9-12 | Technology and Society teaches students critical thinking skills relating to the creation and use of technology. Students are prepared to analyze issues, consider their validity, formulate positions, and defend these positions. This course helps students disentangle the elements of an issue, allowing them to make informed decisions. It prepares all students, whether they intend to be engineers, cosmetologists, or parents, to make informed decisions about their individual, community, and organizational technology uses. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10111 | Construction Technology | 9-12 | To study the technology involved in the construction of residential and industrial structures. The study will include designing, planning, and constructing structures using various materials and methods. | $1 / 2$ or 1 <br> Max credit $=2$ |  |
| 10121 | Manufacturing Technology | 9-12 | To provide students with a broad overview of the technology involved in creating and producing consumer products. The study will include techniques and processes used to produce goods, including manufacturing systems, materials, planning, financing, and distribution | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 10251 | Communication Technology | 9-12 | This activity-based course provides the application of tools, materials, and energy in developing, processing, using, and assessing communication systems. Students will produce graphic and electronic media as they explore techniques used to apply technology to communicate information and ideas. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10005-Industrial Arts <br> - 5-12 or 9-12 <br> OR <br> 10007-Technology |
| 10259 | Design/Drafting | 9-12 | An evolving study of modern drafting within the framework of communication technology. The course provides an experience in design and drafting as it applies in an industrial environment. | $1 / 2$ or 1 <br> Max credit $=1$ | -5-12 or 9-12 <br> OR <br> 10010-Industrial Technology <br> - 5-12 or 9-12 |
| 10260 | 3D Modeling and Design | 9-12 | Students will explore systems of design, construction, and testing. Students will use CAD software to gain technical skills in product design, prototyping, and design. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 10331 | Energy and Transportation Technology | 9-12 | This activity-based course introduces students to generation, conversion, control, transmission, and energy storage. Machines and tools are used to increase strength and mechanical advantage in the movement of people and materials. Energy and transportation are equally applied to production, communication, and transportation activities, introducing major scientific and mathematical concepts that support energy and transportation. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10338 | Advanced Design Applications | 9-12 | This standards-based, engineering-related course provides students with an engineering or technical base. It consists of four learning units every nine weeks: Manufacturing Technologies, Energy and Power Technologies, Construction Technologies, and Transportation Technologies. Each unit has a primary challenge or design problem supported in separate learning cycles. The course allows students to focus on solutions to problems with minimal constraints. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 10339 | Advanced Technological Applications | 9-12 | This standards-based, engineering-related course provides students with an engineering or technical base. It consists of four learning units every nine weeks: Information and Communication Technologies, Medical Technologies, Agriculture and Related Biotechnologies, and Entertainment and Recreation Technologies. Each unit has a primary challenge or design problem supported in separate learning cycles. The course allows students to focus on solutions to problems with minimal constraints. A staterecommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10005-Industrial Arts <br> - 5-12 or 9-12 OR <br> 10007-Technology Education |
| 10410 | Technological Design | 9-12 | In Technological Design, engineering scope, content, and professional practices are presented through practical applications. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and innovate designs. Students research, develop, test, and analyze engineering designs using design effectiveness, public safety, human factors, and ethics criteria. This course is an essential experience for students interested in technology, innovation, design, and engineering. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | 10010-Industrial Technology <br> - 5-12 or 9-12 |
| 10411 | Robotics Engineering | 9-12 | Robotics Engineering provides a comprehensive study of engineering concepts, including physics, programming, mechanical systems, electrical, and electronics systems. These core concepts are delivered with a robotics emphasis through relevant activities and projects. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10415 | Engineering Design | 11-12 | The Engineering Design course is a capstone course focusing on how engineers apply their creativity, resourcefulness, mathematical, scientific, and technical knowledge, and skills to create or refine technological products/systems. Students will be challenged to participate as members of engineering teams within a typical business organization. Independent and group work will reflect authentic engineering projects in the designed world. Students will prepare for the technological world to assume their roles as informed voters, productive workers, and wise consumers. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10005-Industrial Arts <br> - 5-12 or 9-12 <br> OR |
| 10510 | Invention and Innovation | 9-12 | Invention and Innovation prepares students with opportunities to apply the design process in the invention or innovation of a new product, process, or system. Students learn about the core concepts of technology and about the various approaches to solving problems, including engineering design and experimentation. Students use creativity to invent and innovate new products, processes, or systems. Students participate in engineering-design activities where they learn about brainstorming, visualizing, modeling, construction, testing, experimenting, and refining designs. Students also develop skills in researching for information, communicating design information, and reporting results. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | Education <br> - 5-12 or 9-12 <br> OR <br> 10010-Industrial Technology <br> - 5-12 or 9-12 |
| 10511 | PLTW Introduction to Engineering Design | 9-12 | This course emphasizes the development of a design. Students use 3-D computer software to produce, analyze and evaluate models of project solutions. They study the design concepts of form and function and then use state-of-the-art technology to translate conceptual designs into reproducible products. This is a PLTW course, and only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 10511-Project LEAD the WAY Endorsement (Intro to Eng Design) <br> - 5-12 |
| 10512 | PLTW Digital Electronics | 9-12 | This course provides students with applied logic encompassing electrical circuits and devices. Students will use state-of-the-art technology, including computer software and equipment used by industry. Hands-on activities that utilize the team approach to learning how to solve real-world problems while reinforcing the study of math and science. This is a PLTW course, and only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10512-Project LEAD the WAY Endorsement (Digital Electronics) <br> - 5-12 |

# HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES 

## GRADES 9-12

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10513 | PLTW Principals of Engineering | 9-12 | This course allows students to investigate engineering and hightech careers and develop skills and understanding of course concepts. Students employ engineering and scientific concepts to solve engineering design problems, develop problem-solving skills, and apply their knowledge of research and design to create solutions to various challenges. This is a PLTW course, and only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10513-Project LEAD the WAY Endorsement (Principles of Engineering) <br> - 5-12 |
| 10514 | PLTW Civil Engineering \& Architecture | 9-12 | This course provides students with opportunities to work in teams, exploring hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their projects, solving problems, and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. This is a PLTW course, and only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 10514-Project LEAD the WAY Endorsement (Civil Engineering \& Architecture) - 5-12 |
| 10515 | Technological Systems | 9-12 | Technological Systems is designed to introduce students to systems and processes to develop an understanding of the impact of technology on humans, the environment, and the global community. It intends to teach students how systems work together to solve problems and capture opportunities. By investigating systems through their function, design, and development, students will understand what systems are, why they are developed, and how 'systems thinking can be used to describe them. Students engage in activities and experiences where they evaluate the impacts of technology through the lenses of culture, society, economics, and the environment. A state-recommended course guide is available. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 10005-Industrial Arts <br> -5-12 or 9-12 <br> OR <br> 10007-Technology <br> Education <br> - 5-12 or 9-12 <br> OR <br> 10010-Industrial Technology <br> -5-12 or 9-12 |
| 10517 | PLTW Computer Integrated Manufacturing | 9-12 | The major focus of this course is to answer questions such as: How are things made? <br> What processes go into creating products? As students find the answers to these questions, they learn about the history of manufacturing, a sampling of manufacturing processes, robotics, and automation. The course involves several key concepts: computer modeling, Computer Numeric Control (CNC) equipment, Computer Aided Manufacturing (CAM) software, robotics, and flexible manufacturing systems. This is a PLTW course, and only instructors with this training may use this number and description. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 10517-Project LEAD the WAY <br> Endorsement (Computer <br> Integrated Manufacturing) <br> -5-12 |

## HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10518 | PLTW Environmental Sustainability | 9-12 | Students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10518-Project LEAD the WAY Endorsement (Environmental Sustainability) <br> -5-12 |
| 10519 | PLTW Engineering Design \& Development | 11-12 | This capstone course allows students to identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they are developing to document their design process. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 10519-Project LEAD the WAY Endorsement (Engineering Design \& Development) <br> - 5-12 |
| 10520 | PLTW Engineering Essentials | 9-12 | This introductory course will give students the foundational concepts of engineering practice, insight into engineering careers, and opportunities to solve real-world problems. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 10520-Project LEAD the WAY Endorsement (Engineering Essentials) - 5-12 |

## HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10610 | STEM Seminar (Tech-Ed) | 9-12 | STEM Seminar provides students with a project-based, integrated, holistic experience with Science, Technology, Engineering, and Math. Taught by an interdisciplinary team of teachers, the course demonstrates the blurring of content areas when solving an authentic problem. It focuses on engaging students in hands-on, interdisciplinary application of the Engineering Design Process. Students engage in authentic projects, create products and presentations, and network with local STEM industry experts. 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 to be globally competitive in the $21^{\text {st }}$ Century. This course curriculum infuses academic content from Math, Science, Language Arts, and Social Studies. It utilizes state standards and technical skills and develops $21^{\text {st }}$ Century Skills such as communication, networking, collaboration, decisionmaking, creativity, and critical thinking. <br> Note: This course can be taught for Technology \& Engineering credit only. For Mathematics credit, use STEM Seminar (Math) under Mathematics. For Science credit, use STEM Seminar (Science) under Science. Only one (1) credit of this course can be used towards the coordinated plan of study for the Academic and Career and Technical Education Scholarship. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: 10005-Industrial Arts <br> - 5-12 or 9-12 <br> OR <br> 10007-Technology <br> Education <br> - 5-12 or 9-12 <br> OR <br> 10010-Industrial Technology <br> -5-12 or 9-12 |
| 10710 | Biomedical Technology | 9-12 | Biomedical Technology is designed to introduce students to recent biotechnology and biomedical engineering advancements. Diverse topics range from cancer treatment utilizing nanomaterials to biomedical devices used in prosthetics and implants. The course will cover the future trends and societal, ethical, and environmental implications of these technologies. | $1 / 2$ or 1 credit <br> Max credit $=1$ | License Code: <br> 10009-Technology and Engineering Education Endorsement -5-12 |
| 10730 | PLTW Principles of Biomedical Science | 9-12 | Students will explore concepts of biology and medicine to determine the factors that led to the death of a fictional person. Students will examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. Students are introduced to human physiology, basic biology, medicine, and research processes while designing their own experiments to solve problems. <br> NOTE: This course can be taught for Technology \& Engineering Education credit only | $1 / 2$ or 1 credit <br> Max credit $=1$ | License Code: <br> 10730-Project Lead the Way Endorsement (Principles of Biomedical Science) <br> -5-12 |

## HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10732 | PLTW Human Body Systems | 9-12 | Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students build organs and tissues on MANIKEN ${ }^{\circledR}$ skeletal models, use data acquisition software to monitor body functions, and take on the roles of biomedical professionals to solve real-world medical cases. <br> NOTE: This course can be taught for Technology \& Engineering Education credit only | $1 / 2$ or 1 credit <br> Max credit $=1$ | License Code: <br> 10732-Project Lead the Way Endorsement (Human Body Systems) - 5-12 |
| 10734 | PLTW Medical Interventions | 9-12 | Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection, screen, and evaluate the code of human DNA, evaluate cancer treatment options, and prevail when body organs begin to fail. Through cases, students learn about various interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. <br> NOTE: This course can be taught for Technology \& Engineering Education credit only | $1 / 2$ or 1 credit <br> Max credit $=1$ | License Code: <br> 10734-Project Lead the Way Endorsement (Medical Interventions) <br> - 5-12 |
| 10810 | PLTW Computer Science Essentials | 9-12 | Students will explore diverse computational thinking concepts, fundamentals, and tools. Students use visual, block-based programming and seamless transition to text-based programming to create apps and websites. They apply computational thinking practices and collaborate to create products and address topics and problems important to them. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 credit <br> Max credit = 1 | License Code: <br> 10810-Project LEAD the WAY Endorsement (Computer Science Essentials) <br> - 5-12 |
| 10815 | PLTW Computer Science Principles | 10-12 | Students will explore computation thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Students will develop programming expertise and explore the workings of the Internet. Projects and problems include app development, data visualization, cybersecurity, and simulations. This course offering aligns with the AP Curriculum Framework standard and the AP CSP assessment. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 credit <br> Max credit = 1 | License Code: <br> 10815-Project LEAD the WAY Endorsement (Computer Science Principles) <br> - 5-12 |

## HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES

GRADES 9-12
High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10820 | PLTW Cybersecurity | 9-12 | Students will be introduced to the tools and concepts of cybersecurity and be encouraged to create solutions to allow people to share computing resources while protecting privacy. Students solve problems by understanding and closing vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior and develops skills as consumers, friends, citizens, and employees who move and process information safely. <br> NOTE: This course can only be taught for Technology \& Engineering Education credit. | $1 / 2$ or 1 credit <br> Max credit $=1$ | License Code: 10820-Project LEAD the WAY Endorsement (Cybersecurity) -5-12 |
| 10950 | Capstone-Technology \& Engineering Education | 11-12 | This course is the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 credit <br> Max credit $=2$ | License Code: 10005-Industrial Arts <br> -5-12 or 9-12 OR <br> 10007-Technology Education <br> -5-12 or 9-12 OR <br> 10010-Industrial Technology <br> - 5-12 or 9-12 |

# HIGH SCHOOL TECHNOLOGY \& ENGINEERING EDUCATION COURSE CODES <br> GRADES 9-12 

High school (grades 9-12) courses in Technology Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10999 | Cooperative Work Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Technology and Engineering Education occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Technology and Engineering Education program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for student progress assessment and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of $1 / 2$ credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: 10005-Industrial Arts <br> -5-12 or 9-12 OR <br> 10007-Technology Education <br> - 5-12 or 9-12 OR <br> 10010-Industrial Technology <br> - 5-12 or 9-12 |

 student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four credit units.)
 on a teaching license from the Education Standards and Practices Board (ESPB).

Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

## HIGH SCHOOL THEOLOGY COURSE CODES

## GRADES 9-12

(These course codes are to be used by nonpublic schools only.)
High school (grades 9-12) courses in Theology require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60010 | Religious Foundations | 9-12 | Religious Foundations' primary objectives include instruction in a religion's history, tenets, and organization; development of personal faith and conviction; and exposure to how daily life may reflect personal religious beliefs. This course typically includes various components particular to a specific religion, such as religious sacraments and symbols, food laws, the authority and structure of the church, the church calendar, and so on. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: <br> 50040-Theology <br> - 9-12 <br> OR <br> Any teaching license <br> AND <br> 40-Theology endorsement <br> - 9-12 |
| 60011 | Comparative Religion | 9-12 | Comparative Religion courses survey and compare the various forms and values of several world religions, offering students a basic understanding of the world's diverse religious faiths and practices. Course topics typically include the belief systems of adherents; the relationships among humans, nature, ancestors, and the spiritual world; and the historical development of each religion. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60012 | Eastern Religions | 9-12 | Similar to Comparative Religion, Eastern Religions provide students with an overview of various religions and belief systems but focus on those of the Eastern World. Religious or philosophical systems of study usually include Buddhism, Hinduism, Islam, Taoism, Shintoism, and Confucianism, among others. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60013 | Western Religions | 9-12 | Similar to Comparative Religion, Western Religions provide students with an overview of various religions and belief systems but focus on those of the Western World. Religious or philosophical systems of study usually include Judaism; Christianity (including multiple faiths such as those of Catholics, Episcopalians, Baptists, Quakers, Mormons, Mennonites, and others); and Native Indian belief systems, among others. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60014 | Scriptures | 9-12 | Scriptures emphasize understanding and interpreting a faith's sacred writings (such as the Bible, Torah, Koran, Book of Mormon, and so on) from the standpoint of religious faith. Course objectives are designed so that students may comprehend the theological, doctrinal, and ethical messages contained within religious scriptures. | $1 / 2$ or 1 <br> Max credit $=1$ |  |

## HIGH SCHOOL THEOLOGY COURSE CODES

## GRADES 9-12

(These course codes are to be used by nonpublic schools only.)
High school (grades 9-12) courses in Theology require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60015 | Old Testament | 9-12 | Old Testament emphasizes understanding and interpreting the sacred writings of the Old Testament from a religious faith standpoint and may focus on one or several books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages but may also include critique and commentary. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 60016 | New Testament | 9-12 | New Testament emphasizes understanding and interpreting the sacred writings of the New Testament from a religious faith standpoint and may focus on one or several religious books. Course content typically focuses on themes, theological concepts, and portrayal of ethical messages but may also include critique and commentary. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60017 | Bible History | 9-12 | Bible History treats the Bible as a historical document and provides an overview of significant biblical events. The content usually includes geography, the relationship among cultures, belief systems, events chronicled in the Bible, and early Jewish or Christian Church history. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 50040-Theology - 9-12 |
| 60018 | Christology | 9-12 | Christology concerns the work and life of Jesus Christ and the literature related to him. Course content is typically based on Christian scriptures, examining the message of Jesus Christ, and applying His message to daily life. | $1 / 2$ or 1 <br> Max credit $=1$ | Any teaching license <br> AND <br> 50040-Theology endorsement <br> - 9-12 |
| 60019 | Religious Figures | 9-12 | Religious Figures allows students to examine the lives and messages of one or several people central to religious faith, such as a prophet, apostle, philosopher, or leader. In addition to a historical study of the person (or people), this course typically emphasizes how these individuals' teachings influence the faith and culture of a religious group. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |
| 60020 | Liturgy and Prayer | 9-12 | Liturgy and Prayer vary widely, usually depending upon the underlying religion, but generally seek to inform students about the meaning and message of public and private worship. Course content typically includes examining common rituals, spoken, or sung prayers, and observed sacraments. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ |  |

## HIGH SCHOOL THEOLOGY COURSE CODES

## GRADES 9-12

(These course codes are to be used by nonpublic schools only.)
High school (grades 9-12) courses in Theology require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60021 | Prayer and Spirituality | 9-12 | Prayer and Spirituality vary widely but seek to enable students to experience a deeper communion with the divine through public and private worship. Course content may include an examination or exploration of traditional and contemporary practices. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60022 | Religious Ethics and Morality | 9-12 | Usually including an introduction to or examination of the tenets of a particular faith, Religious Ethics and Morality seeks to enable students to apply the moral teachings of faith to their own lives, the larger community, and their decision-making processes. Course content may focus on such issues as peace and justice, death and dying, human sexuality, professional ethics, and human rights. | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60023 | Justice, Peace, and Faith | 9-12 | Justice, Peace, and Faith examine the scriptural foundations for justice, typically with a historical overview of a faith's social teaching. This course discusses poverty, hunger, conflict, discrimination, justice, and environmental issues to develop students' ability to critically reflect upon and analyze their roles and responsibilities. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 50040-Theology - 9-12 OR |
| 60024 | Faith and Lifestyle | 9-12 | Faith and Lifestyle focus on the development of young adults from puberty to adulthood, approached from a faith or church perspective. In this course, the religion's values and traditions provide an underpinning for examining identity, independence, sexuality, employment, and leisure. Faith and Lifestyle courses typically discuss adult roles- single life, marriage, religious life, and ordained ministry. | $1 / 2$ or 1 <br> Max credit $=1$ | AND <br> 50040-Theology endorsement <br> -9-12 |
| 60025 | Ministry | 9-12 | Ministry introduces students to the vocation of service. Students may learn counseling skills, plan, participate in religious services, and minister to younger students or local community members (assisting in hospitals, convalescent homes, crisis centers, soup kitchens, and so on). | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60026 | Religious Education and Theology—Aide | 9-12 | Religious Education and Theology—Aide offers students the opportunity to assist instructors in preparing, organizing, or delivering course curricula. Students may provide tutorials or instructional assistance to other students. | $1 / 2$ or 1 <br> Max credit $=2$ |  |

## HIGH SCHOOL THEOLOGY COURSE CODES

## GRADES 9-12

(These course codes are to be used by nonpublic schools only.)
High school (grades 9-12) courses in Theology require 120 contact hours per credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60027 | Religious Education and Theology_Independent Study | 9-12 | Religious Education and Theology-Independent Study, often conducted with instructors, members of the clergy, or religious leaders as mentors, enables students to explore topics of interest related to religion or theology. Independent Study courses may allow students to expand their expertise in a particular religion, explore a topic in greater detail, or develop more advanced skills. | $1 / 2$ or 1 <br> Max credit $=2$ |  |
| 60028 | Religious Education and Theology-Workplace Experience | 9-12 | Religious Education and Theology-Workplace Experience provides students with work experience in a field related to religion and theology. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). This course may include classroom activities as well, involving the further study of the field or discussion regarding experiences that students encounter in the workplace | $1 / 2$ or 1 <br> Max credit $=1$ |  |
| 60029 | Religious Education and Theology-Other | 9-12 | Other Religious Education and Theology courses. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 50040-Theology <br> -9-12 |
| 60030 | Formal and Material Logic | 9-12 | This course covers the grammatical functions of words and their logical relationships being studied in the context of syllogisms using ordinary human language to use thinking skills. Students in this course will learn to decode the meaning of statements and arguments. Deductive inference, mood in syllogisms, complex syllogisms, hypothetical reasoning, truth and falsity of statements, and arguments' validity, invalidity, and soundness are studied. | $1 / 2$ or 1 <br> Max credit $=2$ | Any teaching license <br> AND <br> 50040-Theology endorsement <br> - 9-12 |
| 60031 | Basic Questions of Philosophy | 10-12 | This introductory philosophy course touches upon basic questions present in speculative philosophy through the ages, from preSocratics to contemporary philosophers. Topics include the philosophy of nature, epistemology, philosophy of God, and philosophical anthropology. | Max credit $=1 / 2$ |  |
| 60032 | Theological Anthropology | 11-12 | This course builds upon philosophical anthropology by investigating philosophical claims about human nature considering biblical and systematic theology claims. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |

## HIGH SCHOOL THEOLOGY COURSE CODES

## GRADES 9-12

(These course codes are to be used by nonpublic schools only.)
High school (grades 9-12) courses in Theology require 120 contact hours per credit


* High school curricular requirements are spelled out in NDCC 15.1-21-02. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17029 | Foundations of Automotive | 9-12 | To prepare students to understand the features of a vehicle. Learn safety around the shop and vehicle. Explore careers in the auto industry. Learn proper care and use of hand tools and shop equipment for basic vehicle maintenance. Understand the care of a vehicle, cleaning, and maintenance. Learn to be an informed consumer of a vehicle regarding purchase and care. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 17032-Automotive Technology <br> - 9-12 |
| 17030 | Auto Collision Technology I | 9-12 | This is the beginning course for students interested in auto body repair. It is part of a sequential series of courses covering the repair of damaged bodies, fenders, and replacement parts. Students will be introduced to painting preparation and painting methods. This is a prerequisite to Auto Collision Technology II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17031-Auto Collision Technology <br> - 9-12 |
| 17031 | Auto Collision Technology II <br> - Prerequisite: Auto Collision Technology I | 10-12 | To prepare students for employment in the auto body occupation. All phases of repairing damaged bodies and fenders include metal straightening by hammering, smoothing areas by filing, grinding, or sanding, concealment of imperfections, painting, and replacement of body components and trim. Students completing this sequential course will be eligible for ASE certification, as noted in the NATEF guidelines. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17032 | Automotive Technology I | 9-12 | To begin preparation for employment as an ASE-certified auto technician. This sequential course will include topics on vehicle engines, power transmission, steering, brakes, and electrical systems. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17036 | Automotive Technology Summer Academy | 9-12 | Automotive Technology is a Summer Academy that allows students to take fundamentals learned through online instruction, ITV instruction, or regular classroom instruction from an accepted Automotive Technology program to gain training through projectbased learning. Students will be given more detailed instruction, and hands-on training in Automotive Service Excellence (ASE) recognized processes preparing them for industry certification testing. <br> Automotive Technology Summer Academy must be offered as part of the Automotive Technology program. Prior approval must be received from the Department of Career and Technical Education before offering the Automotive Technology Summer Academy as an option. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 17032-Automotive Technology <br> - 9-12 |

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17035 | Parts Merchandising \& Management | 9-12 | Students will gain knowledge and skills that will enable them to recognize various parts, fill out sales receipts, and collect payments or file the charges on the customer's account. The student will become familiar with the customer's needs and learn how to stock and merchandise the latest parts to meet their needs. Parts merchandisers are found in occupational settings such as automotive dealerships, retail parts stores, wholesale distributors, and others. Students will become aware of occupational and advanced training opportunities in Parts Merchandising. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17035-Parts Merchandising \& Management <br> -9-12 |
| 17037 | Automotive Technology II <br> - Prerequisite: Automotive Technology I | 10-12 | Continued preparation in vehicle engines, power transmission, steering, brakes, and electrical systems will be provided. The training includes diagnostic and testing equipment and tools used in the repair process. Students completing this sequential course will be prepared to enter college Automotive programs and can become eligible for ASE certification in 3-4 areas as noted by NATEF guidelines. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17038 | Automotive General Service Technology I | 9-12 | The General Service Technology program begins with an orientation to the eight areas of NATEF standardized programming - Engine Repair, Automatic Transmissions, Manual Drive, Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance. This sequential course is a prerequisite to Automotive General Service Technology II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17032-Automotive Technology <br> - 9-12 |
| 17039 | Automotive General Service Technology II <br> - Prerequisite: Automotive General Service Technology I | 10-12 | The second-year General Service Technology program consists of a two-hour course continuing orientation to Engine Repair, Automatic Transmissions, Manual Drive, Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance. Students must complete the Electrical/Electronic Systems standard to pass the course. Automotive General Service Technology is a preparatory program to enter college Automotive Technology and does prepare students to be eligible for ASE certification. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17040 | Diesel Technology I | 9-12 | This course allows students to experience a variety of diesel and heavy equipment practices. Students will explore the field of diesel and heavy-duty equipment repair, and learn the basics of safety, equipment identification, and hand and power tools in a lab setting. Students will learn about careers within the diesel and heavy equipment repair industry. Industry partners will enhance lessons. Students will be introduced to diesel engine operation and components, hydraulics, brakeslsuspension, and electrical. Technology-related mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum. NATEF standards and guidelines are followed. This course is a prerequisite to Diesel Technology II. | 1 or 2 <br> Max credit $=2$ | License Code: 17040-Diesel Technology - 9-12 |

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17041 | Diesel Technology II <br> - Prerequisite: Diesel Technology I | 10-12 | This course will serve as a continuation of Diesel I. Students will be exposed to diesel careers and college options in construction, agriculture, aviation, and trucking. Students must demonstrate sound safety practices, shop organization, and equipment management. Students will learn advanced diesel concepts in fuel systems, steering and suspension, tire and wheel diagnostics, service and repair of electrical and electronic controls and systems, engines, drive trains, hydraulics, and air brake systems. Training and practice of Preventive Maintenance Inspection (PMI) are accomplished. Lessons will be enhanced by industry collaboration, job shadows, and internship experiences. Technology, mathematics, reading, writing, vocabulary, blueprint reading, and science are integrated throughout the curriculum. NATEF standards and guidelines are followed. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17040-Diesel Technology - 9-12 |
| 17045 | Introduction to Commercial Driving License (CDL) | 12 | The focus of this class is to give the students an understanding and skills to obtain a CDL certification. Students will start with the basics and move up to the finer points of the trade. Topics include required CDL Manual subjects such as General Knowledge, Air Brakes, Combination Vehicle, and Tanker and Doubles/ Triples endorsements. Also covered are hours of service, weight and balance, vehicle out-of-service regulations, and National Safety Council professional truck driver DDC. Students will use a schoolowned tractor-trailer to log behind-the-wheel hours for real-world experience and to practice for the test. At the end of the year, students will have been taught the skills to obtain a CDL permit and pass the CDL driver's test. Students must be 18 to obtain the CDL permit and earn the CDL license. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 17045-Introduction to Commercial Driving License (CDL) <br> - 10-12 |
| 17050 | Culinary Arts I | 9-12 | Culinary Arts I introduces students to the occupation concerned with preparation and service of food. Contents may include opportunities in the food service industry, career maturity skills, safety and sanitation, organization of food preparation, menu planning, recipe selection, and food purchasing. This course is a prerequisite to Culinary Arts II. | 1 or 2 <br> Max credit $=2$ | License Code: 17050-Culinary Arts -9-12 |
| 17051 | Culinary Arts II <br> - Prerequisite: Culinary Arts I | 10-12 | Culinary Arts II continues training for food service occupation and includes topics on financial management, current issues in food service, legislation affecting the industry and its workers, and career maturity skills. The Culinary Arts program prepares students for college programs in food service. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |

# HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES 

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17072 | Commercial Art I | 9-12 | Commercial Art I introduce students to the skills required to become a commercial artist. Application of art to the design of commercial products for decorative, aesthetic effects, and current styling will be introduced. Software applications will be introduced so that students can develop products electronically. The Commercial Art course is a prerequisite to Commercial Art II. <br> Note: This course can be taught for CTE credit only. For Fine and Performing Arts credit, Commercial Art can be found under Fine and Performing Arts. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17073-Commercial Art -9-12 |
| 17073 | Commercial Art II <br> - Prerequisite: Commercial Art I | 10-12 | Commercial Art II continues skill development in design and aesthetic effects of products. Advanced software applications and training are incorporated. The course also includes orientation to production methods and product knowledge. The Commercial Art program prepares students to enter college commercial art programs. <br> Note: This course can be taught for CTE credit only. For Fine and Performing Arts credit, Commercial Art can be found under Fine and Performing Arts. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17080 | Photography | 9-12 | Students will gain knowledge and skill that will enable them to recognize and understand Commercial Photography in the following areas: 35 mm Camera Operation, Film Processing, Printing/Enlarging, and Lighting. Students will become aware of occupational and advanced training opportunities in Photography. <br> Note: This course can be taught for CTE credit only. For Fine and Performing Arts credit, Photography can be found under Fine and Performing Arts. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17080-Photography - 9-12 |
| 17100 | Building Trades I | 9-12 | Building Trades I provide an orientation to the building trades that meets industry standards. The course is standards-based, beginning with Core Curriculum, which includes Basic Safety, construction math, Introduction to Hand and Power Tools, Introduction to Construction Drawings, Basic Rigging, Communication, and Employability Skills. Fundaments of building are introduced, including floor, wall, roof systems, and structure enclosure. Building Trades, I is a prerequisite to Building Trades II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17100-Building Trades -9-12 |
| 17105 | Foundations of Building Trades | 9-12 | Foundations of Building Trades will expose students to the opportunities available in the architecture and construction industry, including occupations such as carpenter, electrician, plumber, heating/air conditioning technician, safety supervisor, architect, engineer, and other occupations. Students learn about the processes involved in construction projects and may engage in various small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 17105-Building Trades <br> - 9-12 |

# HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES <br> GRADES 9-12 

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17117 | Building Trades II <br> - Prerequisite: Building Trades I | 10-12 | Building Trades II continues with the fundamentals of building with advanced training in floor, wall, and roof systems. Advanced enclosure techniques will be included. Enhanced safety protocol will be included with an emphasis on safety practices. Building Trades II will continue fundamentals learned in Building Trades I but will also include Introduction to Residential Plumbing, Electrical, HVAC, Masonry, Exterior, and Interior Finishing. Students who complete course modules and meet all safety standards will be eligible to receive nationally recognized industry credentials. | $2$ <br> Max credit $=2$ |  |
| 17101 | Building Trades Summer Academy | 9-12 | Building Trades Summer Academy provides a hands-on opportunity for students to integrate previously learned skills from Building Trades I or Building Trades II into Summer Academy. The Summer Academy will combine classroom skills with hands-on learning of building trades fundamentals. <br> The Summer Academy must be part of Building Trades I and Building Trades II and is only for students in established Centers. This class is offered as part of a Building Trades Program. The Center must receive prior approval from the Department of Career and Technical Education before offering the Building Trades Summer Academy as a class option. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ | 17100-Building Trades <br> - 9-12 |
| 17110 | Facilities Maintenance I | 9-12 | Facilities Maintenance I orientate students to careers in maintaining buildings such as office buildings or schools. The course is standards-based, beginning with the Core Curriculum, which includes Basic Safety, Construction Math, Introduction to Hand and Power Tools, Introduction to Blueprints, Basic Rigging, Communication, and Employability Skills. Introduction to door repair or replacement, window repair or replacement, maintaining various floor surfaces, and understanding cleaning methods for various surfaces. Facilities Maintenance I is a prerequisite to Facilities Maintenance II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 17110-Facilities Maintenance <br> - 9-12 |
| 17112 | Heating, Ventilating, \& Air Conditioning | 9-12 | This introductory course addresses air quality standards of the interior environment. Instruction will be provided in the areas of heating and cooling. Students will learn the basic concepts of circulating and cleaning the air and adding or removing humidity. An introduction covers safety, tools, equipment, and the fundamentals of electricity. Students will work with electrical components, wiring, compressors, evaporators, condensers, and metering devices. Troubleshooting methods will be taught in heating and cooling systems. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17112-Heating, Ventilating, \& Air Conditioning <br> - 9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17113 | Automated Manufacturing | 9-12 | Students will learn about the manufacturing industry's concepts and career opportunities. Craft course offerings will include metal welding, machining, blueprint reading, fabrication, robotics, assembly, industry terminology, safety, tools, milling, electrical principles, and measurement. The course of study will also incorporate leadership skills, professional development, and organizational skills. | 1 or 2 <br> Max credit $=2$ | License Code: 17113-Automated Manufacturing <br> - 9-12 |
| 17115 | Sheet Metal Technology | 9-12 | This course provides instruction in the sheet metal industry regarding the cooling and heating of interior environments. The following aspects of the sheet metal industry will be introduced: basic safety, math; hand tools, power tools; blueprints and specifications; fasteners, hangers, and supports; steel and other metals; and an introduction to insulation. Sheet metal processes will include sheet metal duct fabrication, gutters and downspouts, and roof flashing. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17115-Sheet Metal Technology <br> - 9-12 |
| 17118 | Facilities Maintenance II <br> - Prerequisite: Facilities Maintenance I | 10-12 | Facilities Maintenance II incorporates advanced skill training. The Core Curriculum is completed, and enhanced safety protocol, including participation as a safety officer, is included. Additional topics will be introduced, including electrical device service, plumbing fixture maintenance, and landscape maintenance. Students who complete course modules and meet all safety standards will be eligible to receive national recognition and can articulate the national recognition into college construction craft programs. | 1 or 2 <br> Max credit $=2$ | License Code: 17110-Facilities Maintenance <br> -9-12 |
| 17120 | Residential Plumbing | 9-12 | This course provides the student with the basic knowledge of plumbing code, trade skills, job site expectations, and blueprint reading. The curriculum includes state codes, various aspects of materials, equipment and fixtures, and service and installation procedures. Activities will include the layout of water and sanitation systems; working with various materials such as cast iron, plastic, copper, and steel; setting fixtures and proper hookups; and plumbing service. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17120-Residential Plumbing <br> - 9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17125 | Electrical Technology | 9-12 | This program will provide students with the background necessary to enter the field of electrical wiring in residential construction. The course of study includes electrical fundaments, electrical code study, math, residential wiring, electrical drafting, blueprint reading, and alternating current theory. Hands-on practical wiring of equipment circuits will be provided in a laboratory setting. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 17125-Electrical Technology <br> - 9-12 |
| 17130 | Drafting Technology I | 9-12 | Drafting Technology I introduces careers in drafting. The course covers theory, laboratory, and shop work related to gathering and translating data or specifications. Orientation to the use of drafting tools and beginning Computer Aided Drafting software is included in the first year. The types of drafting introduced include architectural, mechanical, structural, pneumatic, marine, electricalelectronic, and topographical, as well as other drawings and sketches. Drafting Technology I is a prerequisite course to Drafting Technology II. | $1 / 2,1 \text {, or } 2$ <br> Max credit $=2$ | License Code: <br> 17130-Drafting Technology $\text { - } 9-12$ |
| 17131 | Drafting Technology II <br> - Prerequisite: Drafting Technology I | 10-12 | Drafting Technology II provides advanced software application training requiring greater detail and accuracy. Use of reproduction materials, equipment, and processes, preparation of reports and data sheets for specification writing, development of plan and process charges, and development of models will be included. Completion of the Drafting Program prepares students for college drafting. | 1 or 2 <br> Max credit $=2$ |  |
| 17132 | Computer Aided Drafting | 9-12 | Students will explore CAD (Computer Aided Drafting) software to complete drawings used in engineering, architecture, and manufacturing. Students will develop a proficiency in CAD commands and their applications and utilize various software programs and work in 2D and 3D formats. | 1 or 2 <br> Max credit $=2$ | License Code: 17130-Drafting Technology <br> - 9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17140 | Audio/Visual Production | 9-12 | Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, online, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included. | $1 / 2,1 \text { or } 2$ <br> Max credit $=2$ | License Code: 17140-Television Production <br> -9-12 |
| 17150 | Electronics Technology I | 9-12 | Electronics Technology I will provide students with a working knowledge of Direct Current (DC) and Alternation Current (AC) theory and application. Integrated math and physic concepts will be provided to support the understanding of DC and AC circuitry. Electronics Technology I is a prerequisite course to Electronics Technology II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 17150-Electronics Technology <br> -9-12 |
| 17151 | Electronics Technology <br> II | 9-12 | Electronics Technology II continues skill development using solidstate technology such as diodes, transistors, integrated circuits, optoelectronic devices, digital electronics, power supplies, and amplifiers. Additional topics include communication, instrumentation, lasers, security systems, and electronic systems technology. Articulation with college electronics programs is available. Electronics Technology II is a prerequisite to Electronics Technology III. | 1 or 2 | License Code: 17150-Electronics Technology |
| 17152 | Electronics Technology III | 9-12 | Designing and installing computer networks, home theater, security systems, and Programmable Logic Computers. Students will also have opportunities for Career tours and hands-on projects to enhance the student's understanding of the electronics career field. Full articulation agreements with post-secondary education with successful completion of the course. | 1 or 2 <br> Max credit $=2$ | - 9-12 |
| 17190 | Graphic Communications I | 9-12 | Graphic Communications I includes instruction in graphic theory, hot and cold typesetting, lithography, photo engraving, and other graphic arts related to the printing industry. Emphasis on applied academics, professional development, leadership, and organizational skills are integrated. Graphic Communications I is a prerequisite course to Graphic Communications II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: 17190-Graphic |
| 17191 | Graphic Communications II <br> - Prerequisite: Graphic Communications I | 10-12 | Graphic Communications II provides advanced instruction in typographical layouts and designs, hand and machine typesetting, and camera and plate work. Emphasis on applied academics, professional development, leadership, and organizational skills are integrated. Graphic Communications | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | - 9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17200 | Heavy Equipment Operations | 10-12 | Heavy Equipment Operation enables students to safely operate heavy equipment for mining, construction, and utility industries. Typically, courses also include light maintenance principles and techniques. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 17200 - Heavy Equipment Operations \& Maintenance - 9-12 |
| 17201 | Heavy Equipment Mechanics <br> - Prerequisite: Heavy Equipment Mechanics | 10-12 | Heavy Equipment Mechanics includes the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment such as that used in mining, construction, and utility industries. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 17200 - Heavy Equipment Operations \& Maintenance <br> - 9-12 |
| 17230 | Machine Tooling Technology | 9-12 | To prepare students to enter the machine tool operation. Covers the theory and shop work related to teaching safe and intelligent operation of machines found in industry are emphasized. Included is a practical application of theory which is required by the occupation. Units of instruction include safety, measurement, tools, cutting tools and speeds, lathes, milling shapers, grinders, and other machine operations. Emphasis on applied academics, professional development, leadership, and organizational skills are integrated throughout the curriculum. | 1 or 2 <br> Max credit $=2$ | License Code: <br> 17230-Machine Tooling Technology <br> - 9-12 |
| 17235 | Foundations of Welding | 9-12 | This course will expose students to opportunities in the manufacturing industry, including occupations such as assembler, manufacturing technician, machine operator, welder, and other occupations in the production pathway. Students learn about the processes involved in manufacturing and welding and may engage in various small projects. This course emphasizes responsibilities, qualifications, work environment, safety, and career paths within construction-related fields. | $\begin{gathered} 1 / 2 \text { or } 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: <br> 17236-Welding Technology <br> - 9-12 |
| 17236 | Welding Technology I | 9-12 | This course introduces students to a career in welding. The course begins covering various types of metal welding, brazing, flame cutting, properties of metals, blueprint reading, electrical principles, welding symbols, and mechanical drawing. Emphasis on applied academics, professional development, leadership, and organizational skills are integrated throughout the curriculum. Welding Technology I is a prerequisite course to Welding Technology II. | 1 or 2 <br> Max credit $=2$ |  |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | $\begin{aligned} & \text { High School } \\ & \text { Credit Options* } \end{aligned}$ | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17237 | Welding <br> Technology II <br> - Prerequisite: Welding Technology I | 10-12 | Welding Technology II provides advanced training in various welding applications in preparation for college welding programs or entering employment. The course will adhere to American Welding Society standards in welding processes. Continued emphasis will be placed on applied academics, professional development, leadership, and organizational skills. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ |  |
| 17238 | Virtual Center Welding Technology Summer Academy | 9-12 | Welding Technology 17238 is a Summer Academy that allows students to take fundamentals learned through online instruction, ITV instruction, or articulation from an accepted Agriculture program to gain training in advanced welding techniques. Students will be given more detailed instruction, and hands-on training in American Welding Society-recognized processes, preparing them for industry certification testing. <br> Virtual Welding Technology Summer Academy must be a part of the Welding Technology or Ag Mechanics class for students in Virtual Centers only and must be offered as part of the Welding Technology program. The Virtual Center must receive prior approval from the Department of Career and Technical Education before offering the Welding Technology class as an option. | $\begin{gathered} 1 / 2 \\ \text { Max credit }=1 / 2 \end{gathered}$ |  |
| 17310 | Recreational Small Engine Technology I | 9-12 | Recreational Small Engine Technology I includes the maintenance repair of various small engines such as lawnmowers, outboard motors, chain saws, and rototillers. The course includes a theory and practical application lab. This course is a prerequisite to Recreational Small Engines II. | $\begin{gathered} 1 \text { or } 2 \\ \text { Max credit }=2 \end{gathered}$ | License Code: <br> 17310-Recreational Small |
| 17311 | Recreational Small Engine Technology II <br> - Prerequisite: Recreational Small Engine Technology I | 10-12 | Recreational Small Engine Technology II provides advanced instruction in the maintenance repair of various small engines. The course includes principles of the internal engine, reading technical manuals, and customer service. | $\begin{gathered} 2 \\ \text { Max credit }=2 \end{gathered}$ | Engine Technology <br> -9-12 |
| 17410 | Exploration of Oil Industry Careers | 9-12 | This is a beginning course for students interested in exploring petroleum industry careers. The course introduces students to oil industry occupations and the occupations concerned with oil production, from exploration to refining, including aptitude and interest. The course will cover the processes involved in exploration for oil and gas, obtaining mineral rights, and getting the oil from the ground to the pipeline. | $1 / 2$ or 1 <br> Max credit $=1$ | License Code: 17400-Petroleum Technology -9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17413 | Petroleum Industry Skills | 9-12 | The course will cover basic workplace safety and emphasize safety protocol required in the Petroleum Industry and the oil field, including safety practices on projects and the use of a safety officer. Students who complete course modules and meet all safety standards will be NCCER and OSHA 10 Certified. Students will be introduced to the Production processes from land rights to pipelines and then the basic principles of oil field technology. The course will cover basic mechanical components and their application. | $\begin{gathered} 1 \\ \text { Max credit }=1 \end{gathered}$ | License Code: 17400-Petroleum Technology -9-12 |
| 17812 | Aviation Technology I | 9-12 | To provide students with employment in the aviation field. The course covers flight, flight operations, aviation weather, performance, and navigation fundamentals. The course also explores careers in air traffic control, flight dispatching, and airport management. Units of instruction include safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics, weather patterns, and hazards. Emphasis on applied academics in math and science is integrated throughout the curriculum and decision-making principles as it applies to flightrelated factors. | 1 or 2 <br> Max credit $=2$ | License Code: 17812-Aviation Technology -9-12 |
| 17813 | Aviation Technology II | 10-12 | Students will be prepared to pass the Federal Aviation Administration, FAA, private pilot verbal exam. The course will cover advanced flight topics as well as topics covered in Aviation I to an advanced level. Students will also work in teams to build a full-scale aircraft. | 1 or 2 <br> Max credit $=2$ | License Code: 17812-Aviation Technology -9-12 |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.


## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17950 | T\&I Capstone <br> - Prerequisite: minimum 3 credits in the same field of study | 11-12 | This course serves as the culminating and integrative experience designed to allow students to expand their knowledge in their career pathways. It is a project-based course that would take a student through the design process to a finished product, incorporating 21st Century Skills, thinking critically, and solving challenging problems. The course would include a major project, engaging in extended learning and/or an internship. The student must be able to demonstrate through their project all that they have learned in their program of study by applying it. Each capstone project should incorporate the broader community, some aspect of "giving back" to others, encouraging students to connect their project (s) to the community or to integrate outside-of-school learning experiences. <br> Key Requirements: <br> 1. Students would meet with the Capstone team (teacher, career advisor, administrator, and parent). <br> 2. Lay out a plan of study (Individual CTE Learning Plan) to meet the goal determined by the Capstone team. <br> 3. Capstone team would monitor progress (assessment) and either add to or change the individual learning plan to meet the student goals. <br> 4. Maintain a portfolio of learning outcomes. | $1 / 2$ or 1 <br> Max credit $=2$ | License Code: <br> 17031-Auto Collision Technology <br> - 9-12 OR <br> 17032-Automotive Technology <br> - 9-12 <br> OR <br> 17035-Parts Merchandising \& Management <br> -9-12 <br> OR <br> 17040-Diesel Technology <br> - 9-12 <br> OR <br> 17045-Introduction to Commercial Driving License (CDL) <br> - 10-12 <br> OR <br> 17050-Culinary Arts <br> -9-12 <br> OR <br> 17073-Graphic <br> Communication <br> - 9-12 <br> OR <br> 17080-Photography -9-12 <br> OR <br> 17100-Construction Technology <br> - 9-12 <br> OR <br> 17110-Facilities Maintenance <br> -9-12 <br> OR <br> 17112-Heating, Ventilating, <br> \& Air Conditioning <br> - 9-12 <br> (Continued on Next Page) |

HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES
GRADES 9-12
High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.


HIGH SCHOOL TRADE AND INDUSTRIAL EDUCATION COURSE CODES

## GRADES 9-12

High school (grades 9-12) courses in Trade and Industrial Education require 150 contact hours per Career and Technical Education (CTE) credit.

| Course Code | Course Name | Recommended Grade Levels | Description | High School Credit Options* | License/credential Required** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 17950 | T\&I Capstone <br> (Continued) <br> - Prerequisite: minimum 3 credits in the same field of study |  |  |  | (Continued from Previous <br> Page) <br> License Code: <br> OR <br> 17400-Petroleum <br> Technology <br> -9-12 <br> OR <br> 17812-Aviation Technology <br> -9-12 <br> OR <br> 17999-Cooperative Work Experience <br> - 10-12 |
| 17999 | Cooperative Work Experience | 11-12 | Provides students with a regularly scheduled, supervised employment opportunity related to Trade and Industrial Occupations to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Trade and Industrial Education program area. There shall be a training agreement among all partners regarding the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessing student progress and on-site visits by the instructor during the student's placement. <br> NOTE: Students must be at least 16 years old and may be paid a wage by the employer. | Maximum of 1 credit per semester, not to exceed 4 credits while in high school <br> Max credit $=4$ | License Code: <br> 17999-Cooperative Work Experience <br> - 10-12 |

* High school curricular requirements are spelled out in NDCC 15.1-21-02, and High school unit - instructional time is NDCC 15.1-21-03. Maximum credit refers to the maximum units of credit a student may earn for a course over four years of high school. (Example: Band - a student may be enrolled in band all four years of high school -- earning a possible total of four units of credit.)
** Please refer to the second page of the teacher's North Dakota Educator's Professional license to verify which subject areas a teacher is qualified to teach. Licenses and endorsements are obtained on a teaching license from the Education Standards and Practices Board (ESPB).
Credentials are obtained from the Department of Public Instruction (DPI) and issued to individuals with a teaching license.

