

TCHS COURSES

2016-2017

The Admission Committee consisting of the teacher, counselor, and principal, may wave the prerequisite requirement for any course on a case by case basis.

APPLIED AND TECHNOLOGICAL SCIENCE

BUSINESS DEPARTMENT

Business Management

Semester Course
Grade Level 9, 10, 11, 12

Acquaints students with the knowledge to identify, analyze, and process business data and information to make business decisions and enhance their knowledge in the business field. Students will know how to obtain and convey ideas and information to impact business decisions and report on organizational needs.

Entrepreneurship

Semester Course
Grade Level 9, 10, 11, 12

Acquaints students with the knowledge and skills necessary to own and operate their own businesses. Topics include economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, accounting, and communication.

Applied Business Development

Prerequisites – Business Management, Economics Entrepreneurship, Business Communications, FACS or Art.
Grade Level 11-12

In this capstone course, students will practice skills of planning, organizing, directing, and controlling functions of operating a business while assuming the responsibilities and risks involved. Students will have the opportunity to learn business and job skills in a real business situation through our student print and design business. This opportunity will be available to juniors and seniors who have taken a business, art or FACS course. Students who do not meet this criteria will be looked at on an individual basis at the discretion of teacher and administration. All students will have to go through the job application process including an interview. Students will develop skills in enterprise development, market analysis and financial preparation.

Business Communications

Semester Course
Grade Level 9,10,11,12

Helps students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating non-verbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business maybe practiced through problem-based projects and real-world applications.

Economics

Semester Course
Grade Level 9,10,11, 12

Students in Economics will be introduced to the American economic system. Some topics covered will include: GNP, economic growth, unemployment, inflation, deflation, supply and demand as well as a variety of personal finance concepts.

Accounting I

Grade Level 10, 11,12 (*College Credit Available*)

This first-year course is designed to give students a thorough background in the basic accounting procedures used to operate a business. The accounting procedures presented will also serve as a sound background for employment in office jobs and preparation for studying business courses in college. Because the complete accounting cycle is presented in this first-year course, the students will see how each employee's job fits into the cycle for a business, a concept that employers feel is an important qualification for any job.

Accounting II

Prerequisites- Accounting I
Grade Level 11, 12
(College Credit Available)

Students will expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

Finance – Workplace Experience

Prerequisites- Accounting I
Grade Level 11, 12 with interest in Accounting and Finance as a career.

Courses provide students with work experience in fields related to finance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

TECHNOLOGY EDUCATION DEPARTMENT

Materials and Processes

Grade Level 9

Students in Materials and Processes will develop basic skills in planning, designing, and constructing a wood project. Special emphasis will be placed on safety and running wood working machines. Students will be required to take and pass safety tests on each machine with 100% before they will be allowed to operate that machine.

Industrial Education I

Grade Level 10-12.

Industrial Education I is a basic woodworking class. Students will learn to identify and safely use the tools and machines of the woodworking area. The students will develop a degree of skill in using the tools and machines to design and build a project and be able to choose the best materials and become efficient and economical in building a project. Characteristics of woods, planning, designing, and completing a bill of materials will also be covered.

Industrial Education II

Prerequisite is Industrial Ed I. to
Grade Level 11-12.

Students in Industrial Education II will further develop their skills in the use of woodworking machines in the creation of projects. They will develop problem-solving and creative abilities to study and utilize the processes and materials common to the woodworking area. Students will increase their knowledge on topics from Industrial Education I as well as study processing and finishing methods for wood projects; construction methods; and planning and designing economical construction of projects. The students will research and report on opportunities available in the woodworking and technology fields.

Industrial Education III

Prerequisite is Industrial Ed I.
Grade Level 12

Students will increase their knowledge and skill from tasks taught in Industrial Education II. They will develop specific technical skills needed to pursue in-depth production and design techniques used in independently producing their own project. The students will develop the knowledge and skill required to best choose the right career to pursue in the technology field.

FAMILY AND CONSUMER SCIENCE

Career & Life Planning

Semester course

Required 9th grade

This course is required for all freshmen as part of the freshman block. The course includes an introduction to the world of work, the career selection process, the job application process, workplace skills and balancing work and family. The students in the course will participate in a variety of activities including a life and career plan. They will also explore the relationship of skills developed in high school and their future life and career success. This course introduces students to the skills and strategies helpful in becoming more focused productive individuals. This course emphasizes goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. It also allows students to explore various career and lifestyle choices.

Culinary Essentials

Semester Course

Grade Level 9-12

This course provides students with the knowledge and skills related to the selection, purchase, and preparation of food in order to obtain and maintain balanced nutrition. The course will explore and evaluate wellness areas as they apply to nutrition and dietary guidelines, food preparation and meal planning, and sanitation and safety procedures. Food-related careers will also be covered.

Exploring Clothing

Semester Course

Grade Level 9-12

This course is designed to help students make textile and clothing decisions to meet individual and family needs. The course will include the completion of several textile projects. Clothing and textile careers will be explored.

Human Growth & Development

Semester Course

Grade Level 10, 11, 12

This course provides students with knowledge about the physical, mental, emotional, and social growth and development of humans from conception to old age, with a special emphasis on birth through school age. Course content will provide an overview of life stages, with a strong tie to prenatal and birth processes; fundamentals of children's emotional and physical development; and the appropriate care of children.

Nutrition and Wellness

Semester course

Grade Level 11, 12

(College credit available)

This course focuses as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.

Family Studies

Semester course

Grade Level 11, 12

This course emphasizes building and maintaining healthy interpersonal relationships among family members and other members of society. This course 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 also covers topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner.

Consumer & Personal Finance

Semester course

Grade Level 11, 12

This course provides students with an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. This course may also provide an overview of the American economy.

Career/Community Connections

Year course
Grade Level 11, 12

This is an application level course that applies the technical skills in careers related to providing for the needs of humans. This professional learning experience may be unpaid or paid, outside or within the school environment, but provides the opportunity for learners to focus on 21st century skills, and acquire job-seeking and retention skills needed to advance within this unique workplace.

Housing/Interior Design

Semester course
Grade Level 10, 11, 12

This course is designed to help students identify and develop criteria for selection of housing and furnishings that will meet the needs of the individual and/or family. The students will investigate and apply the history of housing to current and future housing trends, develop and complete design plans, and list, investigate and explain housing and interior design careers.

Textiles, Fashion and Merchandising

Semester course
Grade Level 10, 11, 12

This course is designed to help students identify the influence of fashion history on current and future trends. They will be able to identify various textiles, design, promotions and the basics of a market economy. They will be able to describe retail fundamentals and strategies for retail success as well as explore careers in the fashion industry.

VOCATIONAL AGRICULTURE DEPARTMENT

Agriscience

Grade Level 9

Agriscience is an introductory course that introduces students to the broad field of agriculture and its place and effect upon our economy. Students will develop an understanding of the careers in the agricultural industry and the process of the production of products from the farmer to the processor and finally the consumer. They will also develop shop safety and mechanics skills along with Supervised Agricultural Experience (S.A.E.) activities.

Animal Science

Prerequisite is Agriscience or Instructor Permission
Grade Level 10, 11, 12

Animal science is the study of science as it relates to the production and distribution phase of the animal agriculture industry. Students will learn the practical application of recognized, recommended, and approved practices of livestock enterprises. This class will assist those entering careers in production agriculture, agribusiness, animal science, and veterinary medicine.

Horticultural Science

Prerequisite is Agriscience or Instructor Permission
Grade Level 10, 11, 12

This course will include an in depth look at plant taxonomy, plant processes and growth factors, plant propagation, pest control, soil science, turf establishment, gardening, equipment service and maintenance, greenhouse operations, nursery production, tissue culture. Leadership and personal development skills are taught through the integration of FFA career development skills and SAE activities.

Plant and Soil Science

Prerequisite is Agriscience or Instructor Permission
Grade Level 10, 11, 12

This course involves the study of basic plant identification, anatomy and physiology, environmental requirements for optimum plant growth, plant propagation methods, greenhouse management and pest management. Other areas of study include field crop sciences, landscape plants, specialty crops, soil and water management and crop quality grading. Leadership and personal development skills are taught through the integration of FFA Career Development Events and SAE activities.

Agricultural Welding

Prerequisite Ag Mechanics
Grade Level 11, 12

This course involves the development of welding skills including: MIG and arc welding, oxy-acetylene welding and cutting, project design, and other agricultural mechanic skills. Other areas of focus for this course include: developing career skills, leadership skills, and SAE activities.

Ag Metals Fabrication

Prerequisite: Ag Mechanics

Grade Level 11, 12

This course is designed to provide students with an in-depth study of metals and fabrication with metal products. This course also provides students interested in agricultural mechanics the opportunity to explore the many career possibilities in the field of agricultural metal fabrication. Additionally, hands-on-laboratory activities enhance the classroom learning experience and provide students with the skills needed to participate in Supervised Agricultural Experience Programs and FFA Career Development Events. AMF allows students to further explore arc, gas and mig welding as used in the agricultural enterprises.

Agribusiness Management

Prerequisites are Agriscience and one of the following: Animal Science, Plant and Soil Science, Horticulture or Ag Welding or Instructor Permission.

Grade Level 11, 12

This course is the capstone of the Agribusiness Pathway which is designed to develop student skills in the areas of agricultural business procedures, establishment of an agribusiness, managing and financing the agribusiness, marketing and advertising, and sales techniques and strategies, leadership and communications. Agricultural careers will be discussed and emphasized. This class is tailored for students interested in careers in agriculture economics, agriculture finance, production agriculture, agriculture sales, and other business opportunities. The FFA organization and record keeping will be integrated. Students will be required to establish or continue a Supervised Agriculture Experience Program.

Agricultural Mechanics A-B

Prerequisite Agriscience

Grade level 10,11,12

Prepares students for operational procedures for a home environment. Students learn basic skills in areas, including welding, electricity, land measurement, concrete, and plumbing.

Internship A -B

Prerequisite Agriscience

Grade Level 11,12

Supervised work in an agency or business related to Agricultural Studies. Emphasis is on technical and employability skill development and the construction of a professional portfolio.

Advanced Internship A-B

Prerequisite Internship

Grade Level 12

Supervised work in an agency or business related to Agricultural Studies. Emphasis is on technical and employability skill development and the construction of a professional portfolio.

Greenhouse Production & Management A-B

Prerequisite Plant & Soil Science

Grade Levels 11,12

Students enrolled in this course learn the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Leadership development is offered through participation in FFA.

Advanced Animal Science A and B

Prerequisite Animal Science

Grade Level 11,12

This course is offered to meet the needs of students who want to advance their education in animal science. Classroom and laboratory content may be enhanced by utilizing appropriate equipment and technology. Students will apply knowledge of anatomy and physiology to produce and/or manage animals in a domesticated or natural environment and gain knowledge in species specific operations, genetics, livestock operation, processing and reproduction. Algebra, trigonometry, biology, English and human relations skills will be reinforced in the course.

FINE ARTS

ART

Art I

Art I is an introductory course in which work in various areas of art, including drawing, painting, jewelry, fibers, printmaking, sculpture and ceramics, will be discussed.

Art II, III, IV

Art II, III, and IV offer progressively more advanced experiences in art, emphasizing personal expression in media of the student's choice. Students may concentrate on one medium or work in several. Some of the additional media available are air brush, stone carving, various painting, drawing media, stained glass, etc.

Digital Media Design and Production

Prerequisite: English I or Instructor/Administrator approval.

This course allows students to experience and use a variety of graphic art, web design, and photography programs. In addition to developing photography and design skills, students will develop journalism and writing skills in order to create a yearbook and maintain the school website. Students will have the opportunity to work in a real world setting as they must meet deadlines, cooperate with co-workers and administration, and accept responsibility for creating high quality products that can be viewed not only by students, staff, and community, but also by a worldwide audience.

MUSIC

Students may be in several performance groups: Concert Choir, Girls Ensemble, and Mixed Ensemble.

Concert Choir

Concert Choir performances include MCL Vocal Clinic, Christmas and Spring concerts, a Musical, Trego Show, and other activities as required. Music from various periods will be performed. Lettering is possible, depending on the amount of involvement during the year.

Girls Ensemble Mixed Ensemble

Mixed Ensemble and Girls Ensemble will be selected from Concert Choir members. There also may be a boys' group selected depending on voicing. The Ensembles may perform for local organizations. Both groups may perform for local organizations and will perform at all concerts and music contests. Though practice is scheduled during the day, some morning or evening practices may be required.

FORENSICS

Forensics

This course is designed to develop skills in public speaking. Its emphasis is upon the organization of effective thinking and effective delivery. Guided practice is given in the preparation of informative and persuasive speeches. Instruction is given in analysis of prose, poetry, and dramatic literature with practice in communicating orally both intellectual and emotional meanings essential to the interpretation of literature. The course will also include acting. Students will practice training the body, voice, and mind into an arts-thinking instrument. Students will have acting exercises, scene analysis, and performances.

LANGUAGE ARTS/COMMUNICATIONS

TCHS requires that all students have four units of language arts to graduate. ENGLISH I, II, III are required courses. **A student may choose between English IV or Advanced English for the fourth credit.** It is our desire to give each English student an opportunity to further his abilities in the fundamental areas of writing, grammar, reading comprehension, literature study, poetry, and vocabulary and spelling.

English I

Required for graduation.
Grade 9

English I focuses on reading, grammar, writing, speaking, and listening skills. Students will fine-tune paragraph writing; begin to write extended expository essays using the six-trait writing model while using claims and citing evidence, practice grammar skills and student vocabulary. In addition, students will study short stories, non-fiction, fiction, and drama elements. Students will read novels and participate in independent reading assignments.

English II

Required for graduation.
Grade 10

English II focuses on reading, grammar, and writing, speaking, and listening skills. Students will read and review the elements of literary and expository texts, study vocabulary, practice reading for comprehension, and participate in independent reading assignments. Students also compose a variety of paragraphs and essays using claims and citing evidence. Finally, students will conduct research projects using and citing sources to create an expository research paper.

English III

Required for graduation.
Grade 11

English III focuses on American Literature. Students study American short stories, essays, poems, and novels. Students will compose a variety of paragraphs and essays using claims and evidence. Students will also conduct longer research projects using and citing sources to create informative and argumentative papers. Finally, the students are required to do independent reading assignments.

English IV

Grade 12

English IV provides a review of the fundamentals in grammar, writing, reading, speaking, and listening. The emphasis of this class will be life skills. This course will focus on preparing the students for the work force or additional schooling. Students will prepare cover letters and resumes. They will research different types of employment, and the different types of schools incorporating terms that are associated with each. Students will also incorporate technical reading and writing.

Advanced English/ College English

Composition I and II

Must pass Colby Reading and English Exam to enroll in college credit.
Grade 12

Advanced English is designed for seniors who plan to attend a four-year or junior college. The emphasis of this class is grammar study; expository, research-based, and technical writing; English literature and technical reading; and vocabulary study. Students are also required to complete independent reading projects. **Students taking this class for college credit will purchase a college textbook and pay tuition fees to Colby Community College.**

COMMUNICATIONS

Language Arts Communications – College Speech

Semester Course
Open to Juniors and Seniors

Students will identify topics appropriate for oral presentations, conduct research on selected topics, and incorporate that information in to well-constructed oral presentations that are clear to purpose and audience. Also, in their delivery of various speeches, students will employ visual aids, appropriate vocal techniques, and body language. Finally, students will evaluate personal speeches and the speeches of others. **Students taking this class for college credit will purchase a college textbook and pay tuition fees to Colby Community College.**

FOREIGN LANGUAGE

Spanish I
Grade Level 9, 10, 11, 12

This is an introductory language course aimed at the beginning Spanish student. Through the use of Rosetta Stone, the course introduces vocabulary words, grammar, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure.

Spanish II
Grade Level 10, 11, 12

This is a course designed for the advanced Spanish student. Through the use of Rosetta Stone, the Spanish II student will gain a mastery level of basic Spanish vocabulary words, grammar, speaking, reading, and writing skills.

MATHEMATICS

TCHS requires that students have three credits of Mathematics to graduate.

Lifetime Math

Admission by Committee approval.

Lifetime Math is designed to provide students with mathematical skills required for effective participation in modern society, with a foundation essential for further study of advanced mathematics.

Students will compute wages and take-home pay after subtracting deductions; make deposits and withdrawals, write checks and balance a check book; use W-2 forms and 1040A forms to figure taxes; use measurements of length in metric and English measures to find perimeters, areas and volume; use mean, median, and mode to interpret data.

Algebra I

Algebra I is designed for entry-level math students to gain the fundamental ideas of algebra, geometry, and other math curriculums. The class will ready the student for higher math studies and begin preparing the student for testing for college and a higher level of studies. This course will be incremented so that the student will learn new concepts each day, with review of previously learned concepts.

Students will solve linear equations, solve equations using substitution, elimination and graphing, solve and graph inequalities in one or two variables, factor algebraic expressions, perform operations with polynomials, solve quadratic equations, solve problems using the Pythagorean Theorem, and simplify radical expressions.

Students will need a notebook and a four-function calculator with a square root key.

Geometry

Prerequisite Algebra I.

Geometry furthers the studies begun in Algebra I. In this course students will be introduced to the beginnings of trigonometry.

Students will solve problems using geometric definitions, postulates, corollaries, and theorems; write explanations of concepts using complete sentences; solve problems using the basic concepts of trigonometry; find areas and volumes of geometric planes and solids; convert from one label to another using unit multipliers; solve problems using scientific notation; solve quadratic equations by using factoring; completing the square and quadratic formula; use algebraic concepts in other subject areas, find equations of perpendicular and parallel lines; identify various quadrilaterals and name the properties of each, determine if figures are similar using proportions; prove algebraic and geometric concepts with two-column proofs; solve problems using concepts of geometry and trigonometry; solve trigonometry problems using the scientific calculator; in complete sentences, write explanations of solutions to problems.

Students will need a scientific calculator, notebook, ruler, protractor, and compass.

Algebra II

Prerequisite Algebra I.

Algebra II moves deeper in the study of higher algebra, geometry, and trigonometry. Probability will be studied, along with analytic geometry (study of parabolas, circles, ellipses, and hyperbolas).

Students will use deductive reasoning to reach conclusions; use theorems and postulates of inequalities to solve problems; apply properties of real numbers to expressions, equations, and inequalities (including absolute value and compound inequalities); graph quadratic functions and solve quadratic equations and inequalities by various methods; solve systems of equations; use linear programming to find maximum and minimum values of a function;

evaluate polynomial functions using the Remainder and Factor Theorems; graph rational expressions by locating asymptotes and holes; solve various problems in probability; solve problems involving logarithms; solve problems using determinants of matrices and matrix algebra; graph the various conic sections; solve and graph equations of higher than second degree and investigate their roots and zeros; use combinations and permutations to find probability, find exact values of trigonometric functions, solve triangles using Law of Sines and Law of Cosines; change radian measure to degree measure and vice-versa.

Students will need a scientific calculator and notebook.

College Algebra –

Calculus (second semester)

Prerequisite is Algebra II. College Algebra 1st semester only. Must pass Compass Math Exam to enroll in college credit or receive a 22 on math portion of ACT.

College Algebra continues covering the concepts introduced in Algebra II.

In Calculus, students will learn and use the laws of limits; learn about differentiation and derivatives and find them using various rules, such as chain rule, power rule, product rule, and quotient rule; learn about the mean value theorem and use it to find maximum and minimum function values; learn about integrals and use them to find volumes, lengths of curves, work and force, and apply these to problems in chemistry, biology, physics and economics; use the properties of exponential and logarithmic functions to complete derivatives and describe exponential growth and decay in cross-curricular applications.

Students will need a scientific calculator and a notebook. It is recommended to have a graphing calculator, but not required.

Students taking College Algebra and/or Calculus for college credit will purchase a college textbook and pay tuition fees to Colby Community College.

Plane Trigonometry

Semester Course

(College credit available if completed College Algebra with a C or better or ACT math 24 or higher)

This course includes trigonometric functions and their applications, solution of triangles, trigonometric identities and equations, and graphical analysis of the trigonometric functions.

Elements of Statistics

Semester Course

(College credit available if completed College Algebra with a C or better or ACT math 24 or higher)

This is an introductory course designed to develop an understanding of probability, frequency distributions, measures of center, standard deviation, probability distributions, tests of significance appropriate to binomial and normal populations, correlation, analysis of variance, the bell curve, measures of relative standing, exploratory data analysis, binomial probability distributions, and misuses of statistics.

Math Lab

Admission by committee approval

This is a course designed to assist high school students who are working below grade level in mathematics. By utilizing a differentiated method of instruction that is the ALEKS web-based learning software along with a great deal of one on one help from the instructor, students are motivated to review and attain the skills they need to get them prepared to do math that is appropriate for their grade level.

SCIENCE

Students graduating from TCHS will be required to have three science credits, one from life science and one from physical science. One of these credits must be received their freshman or sophomore year.

Integrated Science

Grades 9, 10, 11, 12

Integrated Science is an introduction to Physical, Earth and Space sciences. The course will link concepts from physics and chemistry to their applications in more complex Earth systems. For example one unit will deal with temperature, heat, phase changes and density before applying this understanding to the Earth's weather systems. Other topics that will be covered and applied include motion, force, energy, chemical structure and reactions, electricity, magnetism, waves, astronomy, as well as earth structure and history. This course will focus on experiments, engineering concepts, and constructing and understanding mathematical models.

Biology I

Life Science credit.
Grades 10, 11, 12

Biology I is the study of life. Students will apply inquiry skills to investigate the natural environment and the interrelationships between its living and non-living components.

Topics include: basic cell structure and function; molecular basis of heredity; classify and categorize organisms; basic concept of evolution of species; interdependence of organisms and their interaction with the living and non-living environment; compare and contrast the relationships which exist between structure, function, and diversity of organisms; and basic animal behavior patterns.

Advanced Biology

Prerequisite is Integrated Science, Biology I, or teacher approval.
Grades 11, 12

This class is designed for students interested in a health-related field such as medicine, laboratory technology, genetics, nursing, and veterinary medicine. This course provides an in-depth study of cellular biology, genetics, pathogens and disease, evolution and the major anatomical and physiological systems of the human body. Field trips to various labs are scheduled. The course also includes dissections of various types of body organs, including a complete fetal pig. 5 credits of college credits through Colby Community College are available as BI177 Principles of Biology with Lab.

Chemistry I

Prerequisite is Algebra I.
Grades 11, 12
Grade 10 w/ instructor approval.

Chemistry II

Prerequisite is Chemistry
Grades 11, 12
(College Credit Available)

Physics

Prerequisite is Algebra I, Chemistry I, enrolled in and/or completed Algebra II and Geometry, or instructor approval.
Grades 11, 12

Independent Research in Science

Prerequisite is at least a B in an advanced science class. Prerequisite is Biology and at least be enrolled in Chemistry.

Instructor approval required.

Chemistry I provides a student with a solid foundation for future studies in the sciences. Students will explore and improve their understanding of matter, its structure, its reactions, its importance to our world, and be able to make predictions involving changes in matter using modern laws and theories.

Chemistry II provides a deeper knowledge of chemistry for students planning to pursue a career in the sciences. Students will enhance their knowledge of inorganic, organic and nuclear chemistry and be able to relate chemistry principles to help solve environmental, agricultural, industrial and consumer problems.

Students taking this course for college credit will pay college tuition and lab fee to Colby Community College.

Physics is the foundation for all other sciences. It crosses all sciences and is needed for further studies in any science area. Topics covered include sound, light, heat, electricity and magnetism, forces, motion laws, kinetics, quantum theory, energy types and transfer, space science, and nuclear science.

Students will learn and apply basic statistical methods to research projects done individually in class and then have the opportunity to conduct a research project of their own design.

Independent Research in Science class is offered for seniors who are interested in some type of science career. It is designed to further develop their science backgrounds and interests. The class will include an introduction to basic statistical methods including population sampling, probability, chi squared, and the t test. It will provide students the opportunity to conduct independent research projects they develop according to their individual interests.

SOCIAL SCIENCE

TCHS requires that students have three Social Science credits, which include History and Government, to graduate.

United States History

Required for graduation.

Grades 11, 12

College Credit available 2nd semester. Must pass Colby CC reading exam to enroll for college credit

Students will use a working knowledge and understanding of significant individuals, groups, ideas, events, eras, and developments in the history of Kansas, the United States, and the world, utilizing essential analytical and research skills.

Topics of study include: the role of geographical factors in our nation's history; U.S. Presidents and other influential political leaders; political events; imperialism and territorial expansion; legal changes in the U.S.; social and cultural change in U.S. history; multicultural issues and people; important women in American history and society; issues in Kansas history; and economic decisions.

American Government

Required for graduation.

Grade 12

College credit available 2nd semester. Must pass Colby CC reading exam to enroll for college credit.

Students will use a working knowledge and understanding of governmental systems of Kansas and the United States and other nations with an emphasis on the United States Constitution, the necessity for the rule of law, the civic values of the American people, and the rights, privileges, and responsibilities of becoming active participants in our representative democracy.

Topics of study include: the Articles of Confederation; United States Constitution; Separation of Powers; System of Checks and Balances; the Bill of Rights; political parties in a Democracy; voting requirements and procedures; function of the President; the role of Congress; and the Court System.

World History

Grades 10, 11, 12

Fulfills the 3rd Required Social Science Credit

Students will use a working knowledge and understanding of significant individuals, groups, ideas, events, eras, and developments in the history of Kansas, the United States, and the world, utilizing essential analytical and research skills. Students will also use a working knowledge and understanding of the spatial organization of the Earth's surface and relationships between peoples and places and physical and human environments in order to explain the interactions that occur in Kansas, the United States and in our world.

Topics of study include: civilizations of non-European peoples; and key people and concepts relevant to the Renaissance and Reformation periods; Global Age of Exploration; Scientific Revolution; Enlightenment; Age of Revolutions; Industrialization; WWI; WWII; the World since 1945; the human and physical features that give places and regions their distinctive character; how economic, political, cultural, and social process interact to shape patterns of human populations interdependence, cooperation, and conflict; and the effects of interactions between human and physical systems.

WELLNESS

TCHS requires that students have one unit of Physical Education, which may include Physical Education I, Weight Training, or Lifetime Sports and a course in Health to graduate. TCHS PE uniforms are required attire in each physical education class.

Health/Life Skills

Freshman required course.

Students in ninth grade health will explore and explain the importance of positive wellness habits. Students will demonstrate essential communication concepts, evaluate drug use, compare and contrast public health issues and practice injury prevention and safety procedures.

Additional topics include: self-esteem building techniques, stress management skills, ways to reduce sexual pressures; behaviors that promote responsible intimate relations; and sexually transmitted diseases.

Life Skills will cover career exploration and skills needs to be successful in the workforce.

Physical Education I

Grades 9, 10, 11, 12

Students in Physical Education I will interpret their personal health, fitness status, analyze current fitness issues, demonstrate effective use of personal and social skills. Students will develop the motor skills necessary to participate in a variety of physical activities and show consideration and respect for differences among individuals.

Strength and Conditioning

Grade Level 9-12 (may be taken all four years.)

Students will recognize and practice components of a weight training program and cardiovascular fitness, that meet their individual needs. Students will demonstrate proper form and techniques that focus on muscle identification, use, and safety procedures.

Lifetime Sports

Open to Juniors and Seniors.
Prerequisite Strength/Cond. or Phys. Ed I

Students in lifetime sports will demonstrate skills, safety procedures, and sportsmanship through individual and team sports, and by participation in physical activities associated with lifetime wellness.

SPECIAL EDUCATION

The purpose of the high school special education classes is to help students who require special attention for academic and social needs. If a student qualifies, a team will develop an Individual Education Plan (IEP) for him / her. Students are included in regular education classes in the least restrictive environment according to their individual abilities. These students receive credit for the subjects studied under the special teacher and must take those courses necessary to fill the requirement for high school graduation. Subjects are individualized to meet each student's special needs to better prepare him or her for the world of work and independent living.

CREDIT RECOVERY

A maximum of two units of credit from a state university independent study department will be accepted toward graduation at Trego Community High School. Requires advance permission from principal. Both the student and parent or guardian must submit a letter requesting the school accept the specific correspondence classes needed to help meet graduation requirements.

Credit recovery is meant for students who need to recover credits that they have previously failed to earn but are required to have in order to graduate from high school. Credit recovery through TCHS makes use of the PLATO web-based learning software. All credit recovery is the student's responsibility to complete outside of the regular school day with only course exams being completed under the supervision of TCHS personnel. The cost of all credit recovery is the responsibility of the student and/or parent. All credit recovery due dates must be followed in order for a student to participate in graduation ceremonies.

DUAL CREDIT CLASSES

Various classes offered at TCHS may be taken for dual credit. High school credit will be offered through TCHS, and college credit will be offered through a college or vocational technical college. The following guidelines will be followed:

1. TCHS will not grant dual credit for any class not taken concurrently during the normal school day.
2. All cost of the college tuition, fees, and any additional textbooks or supplies needed for completion of the college credit will be the responsibility of the individual student. There is no additional cost for only high school credit.
3. TCHS and/or the post-secondary school may limit the amount of college hours a student may take in the same semester. It is the student's responsibility to meet college guidelines for test scores on ACT, Compass or other college requirements. As these may vary from college to college, it is the responsibility of the student to know requirements before enrolling in a class for college credit.
4. Expectations and standards for college credit differ from the expectations for high school credit. Therefore, the grades for each may be different.
5. Only high school credits will be listed on the TCHS transcript, and only college credits will be listed on the college transcript.