



COURSE CATALOG
2015-2016

Welcome to the... **GRANITE TECHNICAL INSTITUTE**

The Department of Career and Technical Education in Granite School District has a well-earned reputation for providing high-quality programs that are targeted at high-demand industries. To further this focus, the *Granite Technical Institute* offers courses in Health Science & Technology, Engineering, Information Technology, Biotechnology, Culinary Arts, Aviation, Agriculture, Cosmetology/Barbering, and Home Building/Construction.

The **mission** of the *Granite Technical Institute* is to support students in finding personal purpose, potential and a pathway to their future. This is accomplished by helping students achieve in their program and move seamlessly into further training and employment. Effort is made to directly align critical academic subjects with career and technical education courses, thus promoting real-world application of academic theory in such areas as mathematics, science and English. In addition, articulation and collaboration with Salt Lake Community College and other post-secondary institutions makes the transition to post high school education easier for students. Clear pathways of training have been designed to support student growth from the 9th through the 12th grades. Courses being offered during the 2014-2015 school year are included in the pages that follow.

CE ** Concurrent Enrollment College Course - Many of the courses offered here at the GTI are concurrent college courses; **11th and 12th grade** students can receive high school and college credit for successfully completing the course. **It is the student's responsibility to apply (\$40.00 non-refundable fee) to the Salt Lake Community College by AUGUST 15TH.** Students must also pay (to the college) a \$5.00 fee per credit hour (non-refundable).

Busing will be provided for students twice daily from the student's home high school to the GTI. All courses listed in this catalog will be taught at the Granite Technical Institute (2500 South State Street) unless otherwise specified. This schedule is designed to accommodate two-period block enrollments. Students interested in registering for these courses should see the Career Center Coordinator at their high school. Questions regarding the Granite Technical Institute can be directed to Devon Hartley at 385-646-4350, email: djhartley@graniteschools.org or Julie Bagley, GTI Counselor at 385-646-4629, email: jjbagley@graniteschools.org

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HOW TO REGISTER

In order to register for any of the classes offered through the Granite Technical Institute, students must **first have a 2.5 GPA & 2.5 CPA**, then pick up an application in the Career Center of their high school. If students do not meet the GPA & CPA they may work with their counselor. Once the application is complete and signed by both the student and their guardian return to the Career Center for review and approval by the Career Center Coordinator. The Career Center Coordinator will then help the student determine whether or not additional information is required and will help facilitate the scheduling process.

9th Grade Student Procedure

Ninth grade students who wish to access designated courses must work out their class schedules individually with their guidance counselor. Fill out a C.T.E. application and return it to the guidance counselor who will then notify the appropriate high school. (Please note that the student will NOT be enrolled in the class(s) unless they turn this in.) Students must also arrange their own transportation to and from the nearest high school where they will catch the bus to the G.T.I. The bell schedules and the bus schedule for the G.T.I. are available at <http://gti.graniteschools.org>.

ACADEMIES OF BUSINESS

The most popular bachelor's degree in the United States is in Business (22% of all bachelor's degrees). Get started now on your collegiate path by enrolling in one of our business academy programs—Hospitality & Tourism or Finance. The Academy of Finance is new this year to the G.T.I. The academies are affiliated with the National Academy Foundation (NAF) and SLCC to allow students to earn concurrent college credit. Students will enroll in two courses each semester. This program requires all students to be concurrently enrolled through Salt Lake Community College.

ACADEMY OF HOSPITALITY & TOURISM

Year (2 period block) 11-12 grade CE ** Concurrent Enrollment College Course

\$25 fee per course required per semester

Did you know the Hospitality & Tourism is Utah's #2 industry, bringing in over \$6 billion in revenue to Utah's economy. The United States Bureau of Labor Statistics estimates that 1.3 million jobs will be added by the year 2020. The Academy of Hospitality & Tourism is a two-year program for juniors and seniors with career interests in the business of hospitality and tourism. The comprehensive curriculum includes business management, marketing, accounting, hospitality services, travel and tourism, desktop publishing, customer service, and business communication. Students take four semester classes each year during their junior and senior years. Familiarization Tours & Job Shadows are taken to expose the students to possible careers in the industry. Possible Familiarization Tours include: Arches National Park, Goblin Valley State Park, Zion National Park, Dead Horse Point, Canyonlands National Park, Bryce Canyon National Park, The Grand America Hotel, Marriott, Intercontinental Hotels Group & many others. Students can earn up to 11 college credits in this two-year program. Enrollment is open to any Granite School District student with a 2.5 GPA and able to excel in college level coursework. Additional Fees may be incurred for optional field trips offered to students.

Note: Open to juniors and seniors for the 2015-2016 school year.

Fall 2015 Semester Courses:

Management 1600: Management Essentials CE
Accounting I

Spring 2016 Semester Courses:

Business Communication
Hospitality Services

Fall 2016 Semester Courses:

Marketing 1030: Introduction to Marketing CE
Sports & Entertainment Marketing

ACADEMY OF FINANCE

Year (2 period block) 11-12 grade CE ** Concurrent Enrollment College Course

\$25 fee per course required per semester

The Academy of Finance is a two-year program for juniors and seniors who are interested in a career in the business of financial services. The curriculum includes economics, accounting, financial planning and products, banking, and marketing. Students take four semester classes each year during their junior and senior years. Students can earn up to 11 college credits in this two-year program. Enrollment is open to any Granite School District student with a 2.5 GPA and able to excel in college level coursework.

Note: Open to juniors and seniors for the 2015-2016 school year.

Fall 2015 Semester Courses:

Management 1600: Management Essentials CE
Accounting I

Spring 2016 Semester Courses:

Accounting II
Business Communications

Fall 2016 Semester Courses:

Marketing 1030: Introduction to Marketing CE
Business Math & Personal Finance

Optional Courses within the Academy of Hospitality & Tourism

ProStart 1 (Includes Certification for Sanitization Test) (2 additional courses in 1 semester) (Full day instead of half at GTI)
Marketing 2000 (Internship-3 college credits-Seniors Only)

Options available in Hospitality & Tourism for 9th & 10th graders

Entrepreneurship Opportunities In Family And Consumer Sciences
Introduction to Hospitality Services (FACS)

AGRICULTURAL SCIENCE

Agriculture is the nation's largest employer, with more than 21 million people working in some phase of industry from growing food and fiber to selling it in the supermarkets. The mission of Agricultural Science and Technology Education is to prepare students for employment and/or continuing education opportunities in the field of agriculture. This is accomplished through technical instruction in the classroom, experiential education in the laboratory, the Supervised Agricultural Experience Program, and through leadership and personal development in FFA (Future Farmers of America-student organization).

Suggestion: If you take the Bio-Ag class first, it will give you a good foundation for all Agriculture Science classes.

INTRO TO AQUACULTURE

Semester (2-period block) 10-12 grade

\$20 Course fee required per semester

This hands-on course gives students an overview of the aquaculture industry. Students spend the majority of class time applying the course's content in practical ways in the greenhouse. Through raising and taking care of fish and aquaponic systems, students gain marketable skills and content knowledge with respect to breeding, production, water maintenance and monitoring as well as management. Students also have opportunity to join and compete in FFA events. **This course may also be taken to fulfill a third science credit requirement.**

ANIMAL SCIENCE I

Semester (2 period block) 9 - 12 grade

\$30 course fee required per semester

Animal Science will provide students with the opportunity to explore the many aspects of the livestock industry. During this course, students will study breeds of dairy cattle, beef cattle, equine, sheep, swine, and poultry. Students will look at animal breeding and reproduction, housing facilities, proper management practices, and feeding and nutrition. Judging and showing of some of these livestock breeds will also be included. FFA involvement is required for all students enrolled in this course. **This course may also be taken to fulfill a third science credit requirement.**

BIOLOGY AGRICULTURAL SCIENCE (BioAg)

Semester (2 period block) 10-12 grades

\$20 Course fee required per semester

This hands-on introductory course is biology with an agriculture emphasis. Students explore such biology topics as cells, inheritance, evolution, and ecology by doing hands-on experiments in the context of agriculture. Students have opportunity to compete in FFA. This course leads to other agriculture courses such as aquaculture, as well as animal, plant, and vet sciences. **This course fulfills 1 core biology credit.**

FLORICULTURE AND GREENHOUSE MANAGEMENT

Semester (2 period block) 9 - 12 grade

\$30 Course fee required per semester

This intensive course in greenhouse operation and management prepares students to produce commercial plant species in a controlled environment and to manage commercial and experimental greenhouse operations. Studies will also include: basic plant biological systems, soil science, plant propagation, and floral design. The GTI and USU horticulture students share the greenhouse used for this course.

This course may also be taken to fulfill a third science credit requirement.

EQUINE SCIENCE

Semester (2 period block) 9-12 grades

\$30 Course fee required per semester

This course prepares students to care for horses and horse equipment; to train horses for various work and athletic or entertainment roles; and to manage horse training, breeding, and housing programs and facilities.

This course may also be taken to fulfill a third science credit requirement.

INTRO TO HORTICULTURE

*Semester (2 period block) 11-12 grades CE ** Concurrent Enrollment College Course (PURE)*

\$30 Course fee required per semester

This course is an introduction to the production of nursery, greenhouse, fruit, and vegetable crops. Residential and commercial landscape construction and management will be explored, and students will learn about interior plants, arboriculture, turf science, landscape plant materials, and home gardening. This class is one of the first requirements for the USU Horticulture Major and also fulfills a Breadth Life Science requirement at USU. The GTI and USU horticulture students share the greenhouse used for this course. Students who major in Horticulture at USU can complete their entire program here at the GTI Campus with USU's extension campus on the 5th floor. **Utah State concurrent enrollment credit PSC 1800-3 credits).**

LANDSCAPE MANAGEMENT/ NURSERY OPERATION

Semester (2 period block) 9-12 grade

\$30 Course fee required per semester

Students will develop knowledge and skills in nursery operation and landscape management practices that will prepare the students to select appropriate plant materials and to design, install, and maintain interior and exterior plantings and hardscapes. They will also learn to maintain the facilities and equipment associated with this industry.

VETERINARY ASSISTANT

Semester (2 period block) 10 - 12 grade

Prerequisite (one of the following): Animal Science I or Equine Science

\$30 Course fee required per semester

This course is designed to encourage students to pursue a career in large animal veterinary practice. The program will focus on the following areas of study: safety and sanitation in veterinary science, veterinary terminology, anatomy and physiology, clinical examinations, hospital procedures, parasitology, Course oratory techniques, animal nutrition, principles of disease, animals in society, career exploration, and animal management. Students enrolled in this program will also have leadership opportunities through the FFA, a component that will be integrated into the vet assistant course. This course provides entry-level skills for those students who want to enter an occupation right out of high school and also provides the background necessary for students interested in pursuing a professional degree. Course oratory activities provide students with the hands-on experience and skills needed to participate in the exciting field of veterinary medicine. **This course may also be taken to fulfill a third science credit requirement.**

AVIATION PROFESSIONAL PILOT PROGRAM

In cooperation with Salt Lake Community College, high school students may enroll in the Aviation courses listed below and receive concurrent enrollment credit from SLCC. Students will typically enroll for two courses each semester - for instance, (1A-2A, 1B-2B) or (3A-4A, 3B-4B). Exceptions to this format must be arranged through the G.T.I. administration.

Suggested order of classes: Sophomore year 2nd semester: Air transportation, Aviation History **Junior or Senior year (must be 17 years old)**
1st half: Private Pilot, Aircraft Systems, Air Transportation & Aviation History.

AIRCRAFT SYSTEMS CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11-12 grade

This is an introductory course that provides pilots with an understanding of aircraft systems, components, and basic operations general to all aircraft. Included will be information about power plants, fuel, and electrical systems.

This course must be taken for SLCC concurrent enrollment credit PILT 1420, 3.0 credits.

AVIATION HISTORY CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11-12 grade

The history of aviation from the earliest times through the modern jet age will be explored. Students will discover significant aviation developments and how they came about. This course must be taken for SLCC concurrent enrollment credit PILT 1050, 2.0 credits, for qualified 11th and 12th grade students.

AIR TRANSPORTATION CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11-12 grade

This course will introduce students to the development of aviation from earliest beginnings to modern day. Students will understand the relevance of significant aviation events, contributions from specific individuals, aircraft development, deregulation, administrative bodies and commercial companies. This course must be taken for SLCC concurrent enrollment credit PILT 1010, 3.0 credits, for qualified 11th and 12th grade students.

PRIVATE PILOT GROUND SCHOOL CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11-12 grade

\$40 Course fee required per semester

This course focuses on the study of aviation fundamentals, principals of flight, aircraft and engine operations, weather, navigation, and radio communications as required by FAA regulations. Students will be prepared to begin flight training. **This course must be taken for SLCC concurrent enrollment credit PILT 1100, 4.0 credits.** Practical application in a simulation lab to include the information for private pilot flight maneuvers, procedures, and regulations for takeoff, cruise, traffic pattern operations, approach, emergencies, and cross-country operations. One hour per week lab time is required.

PRIVATE FIXED WING SIMULATOR LAB CE ** Concurrent Enrollment College Course (PURE)

(Taught in conjunction with Private Pilot Ground School)

Practical application in a simulation lab to include the information for private pilot flight maneuvers, procedures, and regulations for takeoff, cruise, traffic pattern operations, approach, emergencies, and cross-country operations. One hour per week lab time is required. PILT 1110, 1.0 credit.

BIOTECHNOLOGY/BIOMANUFACTURING

BIOTECH RESEARCH CE ** Concurrent Enrollment College Course (PURE)

Year (2 period block) 11–12 grades

\$20 Course fee required per semester

This hands-on introductory course provides opportunity for students to explore the exciting emerging world of biotechnology. It provides a solid foundation for students who wish to pursue careers in fields such as bioengineering, biotechnology, and biological science among others. Developing marketable, hands-on lab skills is the course's primary objective. This objective is met as students work at the lab bench on such topics as DNA structure, gene expression, protein synthesis, recombinant DNA strategies, DNA testing, DNA sequencing, forensics, and bioethics. This course must be taken for SLCC concurrent enrollment credit BTEC1010, 3.0 credits, & BTEC 1015, 1.0 credit for qualified 11th and 12th grade students. **This course may be taken to fulfill a third science credit requirement.**

BIOMANUFACTURING 1 & 2

Year (2 period block) 10–12 grades

\$20 Course fee required per semester

This course offers a project-based introduction in areas such as nutritional supplements, cosmetics and biofuels. Projects include designing and producing nutritional supplements, biofuels, and novel raw ingredients and will include label verification and product presentation (marketing). Students will learn how to ensure and understand safety requirements in the medical, pharmaceutical, and dietary supplement industries. Industry facilities for biomanufacturing companies will be visited to explore possible career paths. The course will also cover the science, engineering and marketing skills necessary in biomanufacturing, as well as legal, social and ethical issues surrounding these industries. Students will have the unique opportunity of working in the same cutting edge lab and using the same equipment as college students and professionals. **This course may be taken for CTE credit or to fulfill a third science credit requirement.**

CONSTRUCTION TRADES

This is a comprehensive construction experience where students, under the supervision of experienced, licensed contractors, help construct an entire house while participating in all phases of home construction or participate in a variety of commercial construction projects. Students may specialize in residential carpentry, commercial carpentry, electrical, or plumbing, with the ability to participate in all of these trades. This is an excellent experience for those interested in construction related careers, including construction management, or for those who want building and remodeling experience. Apprenticeship programs are available. **Transportation is provided to the construction site.**

ELECTRICAL TRADES CE ** Concurrent Enrollment College Course

Year (2 period block) 10–12 grades

This is a comprehensive electrical experience where students are under the supervision of an experienced and licensed electrical contractor. Students will be engaged in the wiring of a home, which includes: the rough and finish wiring, electrical service, and all phone and data. Students will also experience many commercial projects around the district where they will learn conduit bending and the differences between residential and commercial wiring. In addition to hands-on projects, students will also learn the National Electrical Code and Electrical Theory. This class provides great experience for those interested in electricity and those who may want to be part of basic electrical installations and remodeling. Apprenticeship programs are available. This course may be taken for SLCC concurrent enrollment credit ELI 1110, 5.0 credits, for qualified 11th and 12th grade students.

HOME BUILDING (RESIDENTIAL CARPENTRY) CE ** Concurrent Enrollment College Course

Year (2 period block) 10–12 grades

This is both an introductory and second year class that is designed to provide the student with a solid base of understanding and experience in the carpentry trade. Students will be exposed to this trade by constructing a residential home off site. This course will involve students with hands-on and learning activities in the building process from digging the foundation to shingling the roof. Other opportunities include: plan reading, concrete work, all phases of framing, insulation, drywall, electrical, plumbing, hanging doors & windows, interior doors and trim work, exterior finishes, painting. Construction Management is addressed and the class is also offered as a Salt Lake Community Concurrent class for sophomores, juniors & seniors. This class is fun and will provide valuable training and experience that can be used in a career or for personal remodeling or construction projects. This course may be taken for SLCC concurrent enrollment credit CMGT1320, 4.0 credits and CMGT 1330, 4.0 credits, CMGT 1410, 2.0 credits for qualified 11th and 12th grade students.

PLUMBING CE ** Concurrent Enrollment College Course

Year (2 period block) 10–12 grades

This is a comprehensive construction experience where students, under the supervision of an experienced licensed contractor, participate in a variety of commercial construction projects. Students may specialize in plumbing with the opportunity to participate in all trades. This is an excellent experience for those interested in construction-related careers, including construction management, or for those who want building and remodeling experience. Apprenticeship programs are available. This course may be taken for SLCC concurrent enrollment credit PLI 1110, 5.0 credits for qualified 11th and 12th grade students.

CONSTRUCTION TRADES FOUNDATION

Semester (2 period block) 9-12 grades

Construction Trades Foundation is designed to introduce students to the basic skills needed for an entry-level position in the construction field. Students will be exposed to basic safety, which complies with OSHA-10 training. Students will work with construction math. They will be adding, subtracting, dividing, and multiplying whole numbers, fractions, and decimals, and explain their application to the construction trades. Students will learn about the safe use of hand and power tools used in the industry and will be familiarized with reading, interpreting, and applying construction drawings. Students will be taught about basic rigging. They will also be introduced to material handling and recognizing hazards associated with the construction industry. The communication skills needed for job interviews and working with co-workers and supervisors will be emphasized. This class will be a great experience for those interested in the construction industry.

CONSTRUCTION TECHNOLOGY

Semester (2 period block) 9-12 grades

Construction Technology provides students with the opportunity to explore many areas of the construction industry. Licensed contractors teach this class, and students will be able to work through learning modules at their own pace and in several areas. Students will be exposed to site lay out and distance measurements; concrete and masonry; floor systems; wall, ceiling, and roof framing; and roofing applications. They will be taught basic stair layout and exterior finish and will learn about electrical safety and residential electrical installation. Students will also be introduced to drain, waste and vent systems using plastic and copper pipe and fittings for residential construction. This is an excellent class for those who want to learn about the construction industry.

COSMETOLOGY/BARBERING

This program requires all students to be concurrently enrolled through Utah State University

This course covers the instruction and practical knowledge required for the Utah Cosmetology License. Students are required to perform 1600 hours of classroom and laboratory experience, and all instruction will prepare students to take the written and practical Utah Cosmetology Board. Students must have a social security number to obtain a cosmetology license. Students will receive concurrent enrollment (College) credit. **Requires additional on-line registration forms.**

COSMETOLOGY ORIENTATION I CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11–12 grades

\$40 Course fee required per semester

This course helps students gain a basic understanding of the practical and professional skills and theory that apply to the field of Barbering and Cosmetology. You will learn fun and exciting skills that can lead to a career or a way to make extra money. The practical skills covered in this class will include haircuts, lightening & coloring. Successful completion of this course, along with demonstrated competencies will qualify students to receive college credit for Cost 1100 Theory, 5.0 credits, Cost 1110 Lab, 6.0 credits. **Students may earn up to 225 hours of credit towards State License exam preparation by completing this course.**

INTRO TO BARBERING II CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11–12 grades

Prerequisite: COSMETOLOGY ORIENTATION I

\$40 Course fee required per semester

In this course you will continue to build on the skills you learned in cosmetology orientation. We will be learning men's haircutting techniques; you will learn to use different tools to create fun effects in a haircut. We will also cover shaving the face with a straight razor; this is becoming a fun & popular service that more men are requesting. We will emphasize new technology and product knowledge from the industry. Successful completion of this course, along with demonstrated competencies will qualify students to receive college credit for Cost 1200 Barber Theory 5.0 credits, Cost 1210 Barber, Lab 6.0 credits. **Students may earn up to 225 hours of credit towards State license exam preparation by completing this course.**

INTERMEDIATE COSMETOLOGY/BARBERING III CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11–12 grades

Prerequisite: INTRO TO BARBERING II

\$40 Course fee required per semester

This course covers theory of Massage, Facials, Facial Make-up and Waxing. The course also helps students refine their skills to be competitive in a salon setting. Successful completion of this course, along with demonstrated competencies will qualify students to receive college credit for COST 2300, 5.0 credits and COST 2310, 6.0 credits. **Students may earn up to 225 hours of credit towards State license exam preparation by completing this course.**

ADVANCED COSMETOLOGY/BARBERING IV CE ** Concurrent Enrollment College Course (PURE)

Semester (2 period block) 11–12 grades

Prerequisite: INTERMEDIATE COSMETOLOGY/BARBERING III

\$40 Course fee required per semester

This course covers salon business, nails, and disorders, also manicuring, pedicuring and artificial nails. Lecture classes for State Board. (review previous classes). Successful completion of this course, along with demonstrated competencies will qualify students to receive college credit for COST 2400, 5.0 credits and COST 2410, 6.0 credits. **Students may earn up to 225 hours of credit towards State license exam preparation by completing this course.**

EXPLORATORY COSMETOLOGY & BARBERING

Semester (2 period block) 10-12 grades

\$40 Course fee required per semester

Exploratory Cosmetology & Barbering is a class for students wanting to know more about the industry. In this class students will understand preparing life skills, interpersonal skills, management skills, advertising, resumes, basic hair, skin and nail care, braids and up do's, plus much, much, more. **There are NO cosmetology hours received from taking this class.**

BARBERING

Year (2 period block) 11–12 grades

\$40 Course fee required per semester

2 yr. program – 1000 hours - 110 hours per semester, 40 after school lab hours per semester

In this class you will learn modern barbering practices as well as a traditional barber education. You will learn haircutting on men, women and children. You will also learn how to shave a gentleman's face with a straight razor that will include hot towels and a massage. You will also learn to do a men's or women's basic facial. We do a lot of hands on work. In the state of Utah you need to acquire 1000 hours and pass a written and practical test to be eligible to apply for licensure. This industry has many opportunities and it is a fun and challenging class.

ESTHETICIAN

Year (2 period block) 11–12 grades

\$40.00 Course fee required per semester

2 yr. program – 600 hours - 110 hours per semester, 40 after school lab hours per semester

GTI Esthetics provides each student with the highest quality education and state of the art training available in the basic esthetics field. Our training program is dedicated to providing the latest teaching materials, techniques, and products available in skincare through education, guest speakers, and personal study practices. We teach the latest advances in skincare, make-up, waxing, facials, and more. Successful completion of this course requires completing 600 hours of instruction. In the state of Utah you need to acquire 600 hours and pass a written and practical test to be eligible to apply for licensure.

NAIL TECHNICIAN

Year (2 period block) 11–12 grades

\$40 Course fee required per semester

1 yr. program - 300 total hours - 110 hours per semester, 40 after school lab hours per semester

Nail technology is a fast-growing industry. We provide the training and education you will need to take your state board test and become licensed as a nail technician. Classes that we offer are sculptured nails, UV light gels, nail tip application, chemistry and product knowledge as well as how to manage your own salon. In the state of Utah you need to acquire 300 hours and pass a written and practical test to be eligible to apply for licensure.

All class hours are determined by attendance, any absences will need to be made up.

After school lab hours:

Tuesday, Wed & Thursday 2:00 p.m. – 7:00 p.m.

CULINARY ARTS

It's no secret that the restaurant and food service industry is growing. In fact, it is estimated that from 2012 to 2020 the number of jobs in the restaurant and food service industry is projected to increase by 21 million, of which approximately 50,000 will be management positions! The National Restaurant Association Educational Foundation is working hard and getting results in helping to meet this need through initiatives such as its Chef Prep-ProStart program which encourages high school students to consider careers in the restaurant and food service industry.

CHEF PREP/ PROSTART 1 CE ** Concurrent Enrollment College Course

Semester (2 period block) 11-12 grade

\$20 Course fee required per semester

Prerequisites: *Food and Nutrition I or II*

This course focuses on preparing students for careers in the restaurant industry. Students will learn skills dealing with customer relations, food preparation, menu planning, cost controls, marketing, management, and communication. Students will also be required to develop a professional portfolio related to food services. A nationally accepted certification is available upon completion of ProStart 1 and 2. **Students must have a social security number to qualify for the Pro Start Certificate.** This course offers SLCC concurrent enrollment credit CHEF 1110, 3.0 credits.

CHEF PREP/ PROSTART 2

Semester (2 period block) 11-12 grade

\$20 Course fee required per semester

Prerequisites: *Food and Nutrition I or II*

This is an advanced course in restaurant management. Students will gain further skills in the areas of customer relations, food preparation, menu planning, cost controls, marketing, management, and communication. Students will also continue development of their professional portfolio. A 400-hour internship is required for the successful completion of this course. Students must have good social skills, good attendance, and the ability to get themselves to their internship experiences. A nationally accepted certification is available upon completion of ProStart 1 and 2. Scholarships are available for students who pass the National Restaurant Association exam. This course offers SLCC concurrent enrollment credit CHEF 1110, 3.0 credits. **Student must have a social security number to qualify for the ProStart Certificate.**

ENTREPRENEURSHIP IN FACS

Semester (2 period block) 9-12 grade

\$20 Course fee required per semester

This course allows students to develop skills and experience aspects of economics. Activities include organizing a small business, producing products/and or providing services, and managing a small business. The family and consumer sciences laboratories will be used to provide activity-oriented experiences for developing entrepreneurial skills, manufacturing products, and providing services. Student leadership (FCCLA) may be an integral part of this course.

FOOD SERVICE/CULINARY ARTS (OCCUPATIONAL FOODS)

Semester (2 period block) 10-12 grade

\$20 Course fee required per semester

Prerequisites: Food and Nutrition I or II

Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to learn and practice safety and sanitation procedures and to use and maintain commercial food service equipment. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations.

HEALTH SCIENCE TECHNOLOGY

Our Health and Medical Programs are some of our most popular as students recognize that there is a high demand for skilled health care professionals. Students can graduate from high school as a Nursing Assistant, Medical Assistant, EMT, or Pharmacist Technician and make \$9-\$14 an hour and be better prepared for nursing school, medical school, pharmacy school or any other medical profession.

CERTIFIED NURSE ASSISTING

Semester (2 period block) 11-12 grade

Note: It is recommended that students take Medical Terminology prior to taking this course.

You must be 16 yrs. old to begin the course.

\$25 Course fee required per semester

This program prepares students to perform routine nursing-related services to patients in hospitals or long-term care facilities under the training and supervision of a registered nurse or licensed practical nurse. Students learn basic nursing skills such as taking and recording vital signs and recognizing abnormal changes in body functioning. Basic areas of study include: basic nursing skills, personal care skills, mental health and social service needs, care of cognitively impaired residents, basic restorative services and resident rights. A 60-hour clinical experience is required in a nursing facility to complete course requirements. Clinically are from 3:00 – 8:00 p.m. one day per week and a total of two Saturdays from 7:00 a.m. – 3:00p.m. Students must supply their own uniforms, watches with sweep second hands, pens, and small notebooks. Some college and university nursing programs require a CNA for admission to their program. An additional .25 credit will be earned by completing clinical hours. Students must have good social skills, good attendance, and the ability to get themselves to their clinical experiences. **Students must provide a social security number in order to take the state C.N.A. exam.** State certification exam is \$75.

DENTAL ASSISTING I

Semester (2 period block) 11-12 grades

\$40 Course fee required per semester

Dental Assisting I introduces students to the field of dental assisting. Students will learn basic patient care skills in preparation to assist a dentist or dental hygienist in functions of a dental practice. Skills include: infection control procedures, instrument sterilization, patient preparation, examination, preventive care, and coronal polishing procedures.

DENTAL ASSISTING II

Semester (2 period block) 11-12 grades

\$40 Course fee required per semester

Prerequisite: Completion of Dental Assisting I

Dental Assisting II offers students the opportunity to practice skills, introduction to dental materials and restorative procedures, cosmetic and surgical procedures, dental radiographic techniques, diagnostic study models and laboratory skills. Qualified students will have the opportunity to participate in a 90-hour externship at a dental office of their choice.

EMS (Emergency Medical Services) CE ** Concurrent Enrollment College Course through Weber State

Semester 9-12 grades

\$40 Course fee required per semester

Taken with Intro to Health Science & Technology = 2 period block

This semester course provides students with advanced emergency medical information and skills. The course introduces students to a variety of career options in emergency medicine along with preparing students to take nationally recognized tests and certification in Advanced First Aid, CPR and Emergency Medical Response. Students will learn basic skills prior to enrolling in EMT, nursing assisting, medical assisting and dental assisting courses. This course offers Weber State University concurrent enrollment credit AT 2300, 3.0 credits for qualified 11th and 12th grade students.

EMT (Emergency Medical Technician) CE ** Concurrent Enrollment College Course through Weber State

Year (2 period block) 12-grade

\$40 Course Fee Required Per Semester

This program prepares students to perform initial medical assessment, treatment, and comprehensive care in medical crises, under the general supervision of a coordinating physician. Instruction includes all aspects of basic health care, disease disorder, injury diagnosis, emergency treatment procedures for various injuries and disease outbreaks. Students learn theory and then participate in extensive skill practice sessions with EMTs. Successful students take the Bureau of Emergency Medical Services exam to become a Certified EMT. Students must have a social security number to qualify to take the EMT state exam, which costs \$160. Textbook is required for Concurrent enrollment \$75, stethoscope and blood pressure cuff are required for state certification \$50, bandaging supplies are required for state certification \$20. *This course offers Weber State University concurrent enrollment credit PAR 1000 & PAR 1001, 6.0 credit hours.* **Students must provide a social security number in order to take the state Emergency Medical Technician exam.**

EXERCISE SCIENCE/SPORTS MEDICINE CE ** Concurrent Enrollment College Course

Semester (2 period block) 11-12 grade

\$25 Course fee required per semester

This course is designed to teach students components of Exercise Science and Sports Medicine by exploring topics such as anatomy/physiology, medical terminology, injury evaluation, nutrition, rehabilitation, and sports psychology. The course also includes many taping procedure labs and other hands-on activities. Extracurricular opportunities such as Future Doctors and job shadowing externships, allow students to further investigate areas of medicine. *This course offers concurrent enrollment through Utah Valley University, Pes 2400, 2.0 credit hours.*

INTRO TO HEALTH SCIENCE & TECHNOLOGY

Semester 9-12 grades

(Taken with EMS = 2 period block)

This semester course is designed to create an awareness of career possibilities in health care and inform students of the educational options available for health science and health technology programs. Instruction includes beginning anatomy and physiology, medical terminology, medical ethics, diseases and disorders.

MEDICAL ASSISTING

Year (2 period block) 12-grade

\$40 Course fee required per semester

Prerequisite: Medical Terminology or taking Medical Terminology 1st semester at the same time.

This program prepares students to assist physicians by performing functions related to both business administration and clinical duties in a medical office. The business aspect of instruction covers insurance, bookkeeping, medical terminology, and general office management. Clinical study includes providing physician assistance during patient examinations, treatment, administration and monitoring. Students learn to keep patient and related health record information and to perform clinical, administrative and laboratory duties. A 160-hour externship is required for completion of this course. Students must have good social skills, good attendance, and the ability to get themselves to their clinical experiences. Students must obtain the series of three immunizations for hepatitis. This course serves as an introduction to a variety of health related fields.

MEDICAL ANATOMY & PHYSIOLOGY CE ** Concurrent Enrollment College Course (PURE)

Year (2 period block) 10-12 grades (Non-Concurrent) B-day classes

\$15 Course fee required per semester

Year (2 period block) 11-12 grades (Concurrent) A-day classes (CE has additional ACT, SAT, or CPT testing requirement)

Create models of human systems. Explore through dissections and hands-on activities. Investigate how the human body changes with diseases and disorders. This course provides an exciting in-depth experience of the human body that includes medical terminology and medical ethics. Discover your future as a health care professional through job shadowing and service learning experiences. Prepare for success in a variety of health technology programs. **This course may also be taken to fulfill a third Science credit requirement.** All A-day students are required to be concurrently enrolled through SLCC Bio1090, 3.0 credits.

MEDICAL TERMINOLOGY CE ** Concurrent Enrollment College Course

Semester (2 period block) 9-12 grades

\$20 Course fee required per semester

Students must be able to read at or near grade level. This class consists of lecture and video presentations. Students learn the meanings and pronunciations of prefixes, roots, and suffixes that combine to form over 11,000 medical terms. This is essential knowledge for any health career. The other Medical Terminology sections will be high school credit only. This concurrent credit is required for SLCC's Medical Assisting, Surgical Tech, and Pharmacy Tech programs. If students are NOT planning on those programs at SLCC, there is NO NEED for them to take it for SLCC Concurrent Credit, as the class credit does not transfer to other institutions or programs. Medical Terminology is a prerequisite for Medical Assisting and Pharmacy Technician at the GTI and recommended for Certified Nurse Assisting, as well as for any ELL students who are planning on taking medical training courses. *This course offers SLCC concurrent enrollment credit MA1100, 2.0 credits for qualified 11th and 12th grade students.*

PHARMACY TECHNICIAN

Year (2 period block) 12th grade

\$40 Course fee required Per Semester

Prerequisite: Medical Terminology

This program prepares students to support pharmacists by providing assistance during patient consultation, counter dispensing operations, and prescription preparation. Students will also be trained to keep patient and related health record information and to perform a wide range of practice-related duties for both retail and hospital-based pharmacies. Students must have good social skills, good attendance, and the ability to get themselves to their externship experiences. Students must have a social security number to qualify to take the licensure exam. The cost for exams are, National Exam PTCB \$129 or ExCPT \$105 (students need only do ONE test). State Licensure Fee \$99. **Students must maintain a "B" average and complete a 180-hour externship in addition to course work for successful licensure with the state of Utah. Students must provide a social security number in order to take the national exam and become licensed in the state of Utah.**

PHYSICAL THERAPY

Semester (2 period block) 11-12 grades

\$40 Course fee required Per Semester

This course introduces students to the field of physical therapy through the history, medical terminology, documentation, therapy treatments, and pertinent legal and ethical considerations of the profession. Healthcare for diverse population begins its thread in this course. Students will participate in clinical observations.

INFORMATION TECHNOLOGY

Information technology programs include the study, design, development, implementation, support and/or management of computer hardware, software applications, multimedia, computer-based information systems, and integration services. Information technology coursework is divided into four specialty strands. These include: Information Support & Services, Interactive Media, Network Systems, Programming and Software Development. Students may choose to take a sequence of courses in one specialization strand or they may take courses across each strand to gain a broader understanding of the information technology industry.

COMPUTER PROGRAMMING 1

Semester Class (2 period block) 9-12 grade

\$10 Course fee required per semester

This semester course is an introduction to computer programming using C#. Students will learn problem solving and object-oriented programming as they design code and test your own programs. Students will learn C# syntax, graphical user interface (GUI) and simple control and data structures. Students will produce a graphical game as their final project.

COMPUTER PROGRAMMING 2/MOBILE APPS

Semester (2 period block) 10-12 grade

Prerequisite: Computer Programming 1

\$20 Course fee required per semester

This course is designed to learn the JAVA programming language. It is a suitable class for advanced computer programmers who plan to further their information technology education in preparation for college and the workforce. In addition, this course is designed to take programming concepts and implement them into mobile device technology. Emphasis will be on completing individual and team based projects that demonstrate a student's ability to grasp new cell phone technology. Students will build customized user interactive text message, GPS map location, voice recorder, and game mobile applications.

COMPUTER PROGRAMMING PROJECTS

Semester Class (2 period block) 11-12 grade

\$10 Course fee required per semester

This is an advanced computer course for students who have completed Computer Programming 1 and 2 or Advanced Web Development. Students will learn to read and code HTML web pages, program in PHP scripting language and use the relational database MySQL. This course is designed to help students acquire marketable skills. **Students wishing to take this course must make individual arrangements with the instructor.**

INTRODUCTION WEB DEVELOPMENT

Semester Class (2 period block) 9-12 grade

\$10 Course fee required per semester

This course is designed for students who desire an introduction to web development pages using HTML, XHTML, Dynamic HTML, tables, frames, input forms and cascading style sheets. Prior web development is not a requirement for this course. Students will build their own personal websites and maintain their on-going structure and design changes.

ADVANCED WEB DEVELOPMENT

Semester Class (2 period block) 9-12 grade

Prerequisite: *Introduction Web Development*

\$10 Course fee required per semester

This course is designed to take fundamental concepts and technologies used in web development such as XML, XHTML and create more sophisticated web sites. Focus will be on completing team web-based projects that incorporate multimedia, JavaScript and Java Applets. Student will analyze different web designs and use more complex web tools that may include other technologies and mobile devices. Students in this class will maintain a real world website and be responsible for providing new content and functionality.

INTRO TO 3D ANIMATION

Semester Class (2 period block) 10-12 grade

\$15 Course fee required per semester

This semester course offers an entry-level study of the basic principles of 3D and 2D animation. Subject matter includes: 2D animation, timing, secondary motion, stretch & squash, basic 3D modeling, texturing, lighting, UV mapping, rigging and animating a model. This course emphasizes artistic principles for those students interested in the 3D Industry. Students will learn basic principles such as layout and design, color theory, and basic drawing skills. In addition, animation planning, storyboard development, and the production process will be a large part of the course.

ADVANCED 3D ANIMATION

Semester Class (2 period block) 10-12 grade

Prerequisite: *Intro to 3D Animation*

\$15 Course fee required per semester

This semester course offers an advanced level study of the principles of 3D and 2D animation. This course is designed to prepare students for entry into an internship or a college course with the skills necessary to succeed in industry. Subject matter includes: advanced polygonal modeling, nurbs modeling, advanced techniques for both game and movie industries, advanced lighting and texture, dynamics, environmental construction, advanced character rigging and animation. This course expounds on the *instructional* principles taught during the Intro to Animation class, but gives more time for student projects and critique. Students will continue to apply the art principles learned during the intro class, and the principles will be critiqued and applied in their final projects. *Students will have the opportunity to work with Utah Valley University and Salt Lake Community College and interface and work with college professors to seamlessly transition into college and their desired field of study.*

DIGITAL MEDIA II (Projects class)

Semester Class (2 period block) or Full Year (2 period block) 11-12 grade

Prerequisite: *Advanced 3D Animation*

\$15 Course fee required per semester

This semester course offers seniors an opportunity to create and complete a portfolio necessary for internships, college programs and the job application process. Students will have the opportunity to work with real world situations, producing products for both the school district and local businesses, helping to give substance to their portfolios. Students will be critiqued every two weeks to measure their progress, quality of work, and to receive direction as to the overall layout, design and professionalism of the end product. This class is designed after a senior level college studio class to prepare students for what they will encounter in college. In addition, this course will help students complete all necessary paperwork for entrance into college or an internship program. *Students wishing to take this course must make individual arrangements with the instructor.*

COMPUTER MAINTENANCE (A+) CERTIFICATION

Semester (2 period block) 10-12 grade

In this course, students practice troubleshooting, maintenance, and upgrade of PCs. Course content covers setup, memory management, data back-up, and hardware/software diagnostic procedures. The course is designed to prepare students for the Comp TIA A+ certification exam. A+ certification is a testing program that certifies the competency of entry-level (9 month's experience) service technicians in the computer industry. Earning A+ certification means that the individual possesses the knowledge, skills, and customer relation skills essential for a successful entry-level computer service technician as defined by experts from companies across the industry.

LINUX FUNDAMENTALS

Semester (2 period block) 10-12 grade

This semester course introduces students to the SLES11 Linux operating system. Students will learn initial concepts, installation, administration, system management, X-window system, TCP/IP, SAMBA for both workstations and servers. This course also prepares the student for the CompTIA Linux+ certification exam.

BASIC NETWORKING (NETWORK +)/CISCO NETWORKING (CCENT CERTIFICATION)

Semester (2 period block) 10-12 grade

This course focuses on basic networking terms and concepts, the OSI model, transmission media, and protocols used by various vendors in LAN and WAN network implementation. This course is designed to prepare students for the CompTIA Network+ certification exam and is equivalent to 6 months of full time experience working with Peer-to-Peer and Server Client networks. Also, students will be introduced to CCENT (Beginning Cisco Certification). Students will learn to describe the operation of data networks, implement small switched networks, implement an IP addressing scheme and IP services to meet network requirements for a small branch office, implement small routed networks, explain and select administrative tasks requires for a WLAN, identify security threats to a network and describe ways to mitigate those threats, and implement WAN links.

TECHNOLOGY & ENGINEERING

The engineering technology program is a hands-on, project-based approach to learning that better prepares students for entrance into college engineering and/or engineering technology programs. Coursework uses real-world problem solving that answers the age-old student question, "Why do I need to know this?" There are five courses in the Engineering Technology Sequence. Course content is designed to help students explore how engineers and engineering technicians integrate math, science, and communications skills into their profession. Engineering Technology students will engage in the research, design, and construction of models/prototypes in a variety of areas including: electrical, fluid, structural, and mechanical systems.

ARCHITECTURAL DESIGN 1 & 2

Semester (2 period block) 10-12 grade

\$10 Course fee required per semester

If architecture, building construction, interior design, or civil engineering is your interest then this is the class for you. In this class you will learn the process of residential and commercial building design. Students will learn design and construction practices common to architecture. Students will gain knowledge in uniform building codes, blueprint reading, and architectural history. A focus will be placed on sketching, 2D and 3D CAD (Computer Aided Design) drawing. Students will practice using AutoCad and Revit, which are the most commonly used design software packages used in the industry.

COMPUTER INTEGRATED MANUFACTURING

Semester (2 period block) 10-12 grade

\$15 Course fee required per semester

Prerequisite: *Introduction to Engineering Design*

This course teaches students the concepts of robotics and automated manufacturing by creating three-dimensional designs with modeling software and by producing models of these designs. This course builds on computer solid modeling skills developed in Introduction to Engineering Design. Students use CNC equipment to produce actual models of their three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing, and design analysis are included. **This course may also be taken to fulfill a third science credit.** *Students wishing to take this course must make individual arrangements with the instructor.*

DIGITAL ELECTRONICS

Semester (2 period block) 10-12 grade

\$10 Course fee required per semester

Prerequisite: *Principles of Engineering and Introduction to Engineering Design are recommended prior to enrolling in this course.*

Students will use computer simulations to learn about the logic of electronics as they design, test, and actually construct circuits and devices. This is a course in applied logic that encompasses the application of electronic circuits and devices.

This course may also be taken to fulfill a third science credit requirement.

ENGINEERING DESIGN AND DEVELOPMENT (Projects class)

Semester (2 period block) 11-12 grade

\$15 Course fee required per semester

Prerequisite: Principles of Engineering, Introduction to Engineering Design, Computer Integrated Manufacturing

Following a full 4 phase Product Development Protocol, students will use a 3D Computer CAD modeling software, 3D Prototype model making machinery and will receive hands-on plastics process training on a production 25 ton Boy Injection molding Machine. Students will learn the design process and solve problems for which they develop, analyze and create a medical product. **This course may also be taken to fulfill a third science credit.** *Students wishing to take this course must make individual arrangements with the instructor.*

ELECTRONICS, DC/AC

Semester (2 period block) 10-12 grade

\$10 Course fee required per semester

This course covers basic electronics theory for DC and AC fundamentals, circuit analysis and troubleshooting. Students learn the use of electronics test equipment such as digital meters, power supplies, oscilloscopes, function generators and bread-boarding.

This course may also be taken to fulfill a third science credit.

INTRODUCTION TO ENGINEERING DESIGN

Semester (2 period block) 9-12 grade

\$15 Course fee required per semester

This course teaches students the design process through the use of computer modeling software. Students will learn problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

This course may also be taken to fulfill a third science credit.

PRINCIPLES OF ENGINEERING

Semester (2 period block) 9-12 grade

\$15 Course fee required per semester

This course allows students to explore various technology systems and manufacturing processes in order to better understand the world of engineering and engineering technology. Students learn how engineers and technicians use math, science and technology in an engineering problem solving process that benefits people and advances our society. This course also includes concerns about the social and political consequences of technological change. **This course may also be taken to fulfill a third science credit.**

ROBOTICS AND AUTOMATION

Semester (2 period block) 10-12 grade

\$15 Course fee required per semester

Robotics & Automation is a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices by applying science, technology, engineering and math concepts. A rigorous study and application of electrical concepts will include: sources of energy, electrical safety, use and identification of basic electronic components, sensors and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineer documentation. Industrial automation, robotic applications and career opportunities will also be discussed.

TECHNICAL DESIGN 1 & 2

Semester (2 period block) 9-12 grade

\$10 Course fee required per semester

This exploratory class will introduce students to the process of engineering design. Students will focus on the language of engineering, which includes sketching, technical drawing, orthographic projection, geometry, dimensioning standards and drawing presentations used by industry. Students will be instructed on 2D and 3D CAD (**Computer Aided Design**). Students will practice with the latest CAD software used in the field including **AutoCAD**, **Solid Works** and **Revit** as they complete hands on projects.