

Two Semester Courses

SPORTS MEDICINE: This course provides instruction in topics related to the field of Sports Medicine, including prevention, treatment, taping and rehabilitation of athletic injuries, anatomy, cell and tissue structure and response to injury, exercise physiology, therapeutic modalities, therapeutic exercise, pharmacology, and kinesiology.

This rigorous academic course requires a high level of independent study. Training is divided into academic coursework and hands-on clinical experience. Qualified students may participate in job shadowing and/or an internship in a related field during the second semester. **30 elective credits, Meets UC area G approval, Dual Enrollment credits with CSUB for KINE2100: Intro to Athletic Training**

VETERINARY TECHNOLOGY: This course is designed for students to meet entry-level employment requirements as an animal care technician and other related occupations. The course offers training in large and small animal care and includes classroom/laboratory instruction and placement in an internship. Content includes: comparative anatomy and physiology, basic pet grooming skills, animal restraint, nutrition and housing, medical terminology, species and breed identification, disease control-management and human/animal issues. Bakersfield College dual enrollment credits are available for Introduction to Animal Science-ANSC B1. Some students will have the opportunity to work towards their Veterinary Assistant Certification. **Prerequisites: Student should have a C average or better in all science courses. 10 biology & 20 elective credits**

VIDEO GAME DESIGN: This course is designed to teach students the basic fundamentals of game design utilizing industry standard tools (including Unreal Engine 4). At the end of the course, students will have an understanding of game design principles, processes, and best practices. Additionally, students will have gained skills relevant to the craft. These skills include how to write effective design documents, how to utilize the Unreal Engine to prototype, playtest, and balance a game, and how to work within the construct of a team environment to achieve both personal and group projects. Lastly, students will learn about the different specialties designers can take within the industry so they can craft a resume and portfolio to launch themselves onto the path of their choosing. **30 Elective credits**

VIDEO PRODUCTION—NEW PROGRAM

Learn all aspects of visual media productions including film, news, corporate event production, commercials, public service announcements (PSAs) and documentaries while using high-definition cameras. Students are also trained in animation, interactive video and web video production.

Work with clients to produce various projects in a fully-equipped studio and audio bay while developing skills in editing, lighting, audio production and music creation. **30 elective credits**

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AUTO BODY AND FENDER REPAIR: This one-semester course consists of a combination of classroom and body shop experience. This program offers instruction in safety procedures, filling, sanding, welding, cutting, repair of metal surfaces, painting, repair and replacement of auto body parts, shop safety and trade ethics. Students that excel in the classroom may be placed in the community for training in a body shop in the Bakersfield area. Students who take this course during the first semester will have the opportunity to take a different ROC class during the second semester. **15 elective credits**

BODY SHOP INTERNSHIP EXPERIENCE: This one-semester course places students in an internship at a local body shop. Students will get to apply their technical and soft-skills in a real work setting. Students enrolling in this course must first successfully complete Auto Body and Fender Repair and be recommended by the instructor. This course is only available during the second semester. **15 elective credits**

FABRICATION: This one-semester course is for students who have successfully completed the ROC welding course. Students will learn to bond metal together using the S.M.A.W, F.C.A.W, and the G.T.A.W, welding processes. Metal fabrication and construction of various projects is the main focus of the course. **Prerequisites: Students must successfully complete the ROC Welding course. 15 elective credits**

RETAIL AND PROFESSIONAL SALES: PM Session Only

This one-semester course combines classroom instruction and on-the-job experiences in retail stores and professional sales settings. The curriculum includes instruction in sales techniques, cash register operation, retail store accounting, basics of display, job application and interview skills. Students will participate in an internship and have the opportunity to make connections with local business owners and managers that could lead to a possible job offer. This program has a dress code for students when training in stores. Students who take this course during the first semester will have the opportunity to take a different ROC class during the second semester.

5 math & 10 elective credits

WELDING: This one-semester course teaches students to bond metal parts together using ARC, MIG, and TIG welding processes. Instruction includes emphasis on cutting, grinding and welding of various metals. Shop discipline and safety practices are stressed. Upon satisfactory completion of specific skills, students may be eligible to take structural and pipe certification tests (AWS & ASME). Students who successfully complete this course will have the opportunity to take the ROC Fabrication course during the following semester. **15 elective credits**

One semester of ROC will waive one semester of PE credit, if needed.

In order to earn articulated credit you must earn an A or B in the class.

Students with an impacted schedule can earn additional course credit through enrollment in the online education Kern Learn program. See a counselor for details.

The Kern High School District prohibits discrimination, harassment, intimidation, and bullying based on actual or perceived ancestry, age, color, disability, gender, gender identity, gender expression, nationality, race or ethnicity, marital, parental or family status, religion, sex (sexual harassment), sexual orientation, or association with a person or a group with one or more of these actual or perceived characteristics. For concerns or complaints regarding this policy, please contact Associate Superintendent of Human Resources Dr. Mike Zulfa – Equity/Title IX Compliance Officer – 5801 Sundale Ave., Bakersfield, CA 93309 – 661-827-3100.

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ROC *On the job*

REGIONAL OCCUPATIONAL CENTER

501 So. Mt. Vernon Ave., Bakersfield, CA 93307

ROC website: <http://roc.kernhigh.org>

(661) 831-3327



WHAT ARE THE REQUIREMENTS TO ENROLL AT ROC?

- You must be a junior or a senior in high school
- Students must have good attendance habits and a good discipline record

CLASS TIMES: AM Session 7:30—10:30 a.m. Monday—Friday
PM Session 11:45—2:45 p.m. Monday—Friday

Career training can be in your future! See your counselor for enrollment information.

Visit the ROC website for additional program information.

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3D ANIMATION : Bring creative ideas to life by combining traditional artistic skills design techniques to develop projects in 3D animation, effects and games. You'll develop skills in environmental character modeling, texturing, lighting, rigging, animation more using industry standard software such as Maya, Adobe Photoshop, Adobe After Effects and others.

The first semester provides training in computer software for both 2D and 3D animation and students create animation for a variety of content. The second semester focuses on 3D animation, and preparing a portfolio. Also during the second semester students will be grouped on teams to create a comprehensive projects suitable for a demo reel. Students leave the program as well-rounded artists/animations with solid fundamental 3D animation skills and broadened range of computer animation experience. **30 elective credits**

ADMINISTRATIVE OFFICE ASSISTANT: This two-semester course prepares students to support business and administration by providing clerical support. This courses also includes instruction in records management, using technology, business event planning, telephone etiquette, filing, and other critical clerical skills. Students may also have the opportunity to participate in an internship. Bakersfield College articulation credits are available for several different courses. **Credits available: 30 elective credits, Meets UC area G approval**

AG/DIESEL MECHANICS: In two-semesters, the student will learn a variety of skills related to the agriculture and diesel mechanics fields including, but not limited to: safety procedures, shop organization and operation, engine systems, electrical wiring, equipment operation, mobile AC systems, forklift driving, welding/cutting, fabrication, and repair. An internship opportunity will be available for some students. Multiple industry recognized certification opportunities are available through this course. **30 elective credits**

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AG FOOD SCIENCE: Dive into one of Kern County's defining business sectors with Ag Food Science, A "Farm to Fork" course focused on the study and practice of vegetable crop production, improved health and nutrition, and supplemental lessons on ag sales.

Through in-class studies and hands-on labs, students will learn about crop growth and maintenance, crop production standards and their link to human nutrition, ag sales (through participation in a student-run fresh produce market stand), food preparation and meal planning, and the basics of food safety protocols. **30 elective credits**

AUTO TECHNOLOGY: This course offers basic auto repair instruction in five specialized National Automotive Technicians Education Foundation (N.A.T.E.F.) areas including Brakes, Transmissions, Electrical/Electronic Systems, Engine Performance, and Suspension & Steering. An internship opportunity will be available for some students. Multiple industry recognized NATEF certifications are available through this course. Bakersfield College articulation credits are available for Auto Tech I-AUTO B1ab. **30 elective credits**

BOOKKEEPING/ACCOUNTING: This two-semester course teaches students to manage financial records using QuickBooks and learn Sole Proprietorship & Partnership accounting methods. The course also includes instruction in records management using technology, business event planning, telephone etiquette, filing, and other critical clerical skills. Students may also have the opportunity to participate in an internship. Bakersfield College articulation credits are available for several different college courses. **30 elective credits, Meets UC area G approval**

BUSINESS, BANKING & FINANCE: This two-semester course prepares students for a variety of entry-level positions with banks, credit unions, finance companies, and insurance agencies. Areas of instruction and on-the-job experience include: teller duties, finance terminology, check cashing, deposits, customer sales and service. Students must have an interest in working with the public and have good basic communications skills. Students will be placed in an internship. A professional dress code is required. **10 math, 5 CP economics, & 15 elective credits, Meets UC area G approval**

CISCO COMPUTER NETWORKING ACADEMY: This course begins with an overview of computer hardware and software, as well as advanced concepts such as security, networking, and IT professional ethics and responsibilities. Students then receive instruction in comprehensive networking, from network applications to managing routers and switches. Upon successful completion of the course, students will be prepared for an entry level IT job and/or continued training in an advanced level CCNA certification course. Preparation is available for CompTIA A+ certification and the Cisco CCENT certification. **Prerequisites: Student should have a C or better in algebra. 10 math & 20 elective credits, Meets UC area G approval**

DENTAL ASSISTANT—NEW PROGRAM

This program prepares students for an entry-level position as a dental assistant. If you want to become an integral part of a dental practice, our Dental Assistant program is designed to provide you with the relevant training, knowledge, and skills. You can learn how to perform duties such as radiographs, instrument sterilization, tray setups, four-handed dentistry, equipment maintenance, impressions, model trimming, charting, and dental reception duties. Prepared students may have the opportunity to work in an internship at a dental office during the second semester of the program. **30 elective credits**

EARLY CHILDHOOD EDUCATION: This course is designed to prepare students for work in a variety of instructional areas including day care, preschool, and elementary education. Training occurs through a combination of classroom instruction and internship placement in various schools. This course will focus on child development concepts, classroom management, and teaching strategies, which reinforce the basic academic skills of reading, writing, mathematics, science, critical thinking, and leadership. Students will be qualified to receive their Child Development Assistant Permit after successfully completing this course. Bakersfield College articulation credits are available for Child Development CHDV B20 & Child Development CHDV B36. **10 English, and 20 elective credits, Meets UC area G approval**

ENERGY & WATER ENGINEERING—NEW PROGRAM

This program focuses on the technological fundamentals of emerging energy technologies including solar, wind, fuel cell, and hydro power, as well as fossil fuel energy technologies. Students will explore the engineering concepts behind each of these technologies through project based learning. They will also do in depth career exploration in each of the energy fields.

Students will also learn about water treatment technologies and careers associated with water management. This includes the operation and maintenance of water treatment facilities. Students will be prepared to take the Water Treatment Operator Exam upon completion of the course. **30 elective credits**

FASHION MERCHANDISING: AM Session Only

This course offers students an opportunity to study various elements involved in the history, design, manufacturing, advertising, marketing, basics of display and sale of fashion apparel and accessories. The course also includes fashion show production and modeling as an optional part of the program. In addition, instruction in sales skills, techniques for applying for a job and the interview process will be covered. FIDM articulation credits are available. **10 math & 20 elective credits**

FIRE TECHNOLOGY: This course is designed to introduce students to firefighting and to prepare those students with basic firefighting and conservation entry-level skills. Classroom instruction, demonstration, and hands-on field application will be given in basic firefighting, standards for survival, engine, and pump operations, backfiring methods and equipment use, map use, air operations, basic hand tool sharpening and use, emergency medical responder, hazardous materials, auto extrication, fire extinguisher training, and fire line construction. Physical training (PT) is an essential part of this course. **Dual enrollment credits available with Bakersfield College for FIRE B1 and First Responder. 30 elective credits**

INTRODUCTION TO HEALTHCARE CAREERS—NEW PROGRAM

This course is designed for any student interested in pursuing a career in any allied health related career. Students will do in depth career exploration in allied health careers. Students will also have an opportunity to earn dual enrollment college credit for Medical Terminology and Anatomy & Physiology through this course. Both of these are required college courses for all allied health programs

Students who successfully complete the course will be given priority enrollment for advanced training into any of the ROC allied health programs which include, Nursing Assistant, Medical Assistant, Pharmacy Technician, Dental Assistant, or Sports Medicine. **30 elective credits**

LAW ENFORCEMENT: This course prepares students for careers in the criminal justice/law enforcement system. The focus of the course is classroom instruction and participation with the law enforcement Explorers' program in order to learn techniques and proper procedures used to enforce the law in the community. Students will learn how to take reports, handle investigations and deal with citizens who need law enforcement assistance. The course includes extensive writing assignments including report structure and essay writing. Physical training (PT) is an essential part of this course. **30 elective credits**

MEDICAL ASSISTANT: This course teaches students medical law and ethics, various levels of sterilization, how to assist with physical exams and office surgeries, the skills to perform an electrocardiograph, take vital signs, venipuncture, administer medicine (including calculating dosages), communication, and job development skills. Students will be prepared to take a Medical Assistant Certification exam at the end of this course. **Students must provide their own transportation during the internship portion of this course. Prerequisites: Student should have a C average or better in their English classes. 10 biology, 5 health, & 15 elective credits**

MOBILE APP DEVELOPMENT & ENTREPRENEURSHIP (M.A.D.E.): This program will prepare students interested in pursuing a career in mobile application design. Students are challenged to develop computer programs in multiple formats for use in mobile application design. They will also learn the skills necessary to communicate clearly, cooperate within teams, solve logistical problems and present findings.

Students will also consider the entrepreneurial aspects of bringing a new product to market. This will include the distribution, promotion, and pricing of apps, as well as the development of a business plan and the starting and running of a business.

This program will introduce students to embedded technology concepts through a combination of classroom lecture and project-based learning. Students will also learn to design mobile application programs using multiple programming languages. **30 elective credits, Meets UC area G approval**

NURSING ASSISTANT: This course includes instruction in medical terminology, basic nursing skills, medical asepsis, anatomy, physiology, CPR, first aid, and geriatrics. Students will gain on the job experience as an intern in a convalescent facility. Satisfactory completion of classroom and clinical training will allow students to be eligible to take the state exam for CNA certification. Bakersfield College dual enrollment credits are available for Exploring Health Career Occupations - MEDS 67, and Basic Patient Skills & Lab - MEDS 67L. **Prerequisites: Student should have a C average or better in their English classes. 10 biology, 5 health, & 15 elective credits**

PHARMACY TECHNICIAN: Pharmacy technicians help licensed pharmacists prepare prescription medications, provide customer service and perform administrative duties within a pharmacy setting.

The first semester concentrates on basic health care concepts such as medical terminology, safety, pharmacy law, customer service, basic math, pharmacology, problem solving and CPR. During the second semester, students gain occupation-specific skills and knowledge. Students (depending upon age and availability) may participate in work based learning experiences during the second semester.

This rigorous academic course requires a high level of independent study while learning procedures for receiving prescription requests, counting tablets and labeling bottles, along with administrative functions such as answering phones and stocking shelves.

Qualified students participate in job shadowing and/or an internship in a pharmacy during the second semester. At the conclusion of the course students will have the opportunity to take the Pharmacy Technician Certification Exam. **30 Elective credits, Meets UC area G approval**

ROBOTICS ENGINEERING: This program prepares students interested in pursuing careers in robotics or engineering by providing the pre-engineering and robotics skills necessary for entry into postsecondary education programs. Students are challenged to think critically, solve problems and apply technology-based tools effectively and safely. They also learn the skills necessary to communicate clearly, cooperate within teams, solve mathematical, scientific and logistical problems and present findings.

Robotics Engineering introduces students to embedded technology through a combination of classroom lecture and project-based learning. Students learn to design, build, communicate and operate robotic automation equipment. During the year groups within each class will participate in a student directed robotics project that will emphasize design thinking and collaboration. At the culmination of the class students will have been introduced and experimented with a series of different automated platforms ranging from electronic bread boarding and circuit design, Arduino microcontrollers, and Programmable Logic Controllers.

30 elective credits, Meets UC area G approval, Dual Enrollment Credits with Bakersfield College for ELET B1 and ELET B5

SMALL BUSINESS OWNERSHIP—NEW PROGRAM

This program is an in-depth study of small business ownership. Competition and the global economy have opened the door for many new businesses and entrepreneurs are becoming increasingly vital to the economy. This course is designed to educate students about the business environment by learning the nature of the business, its products and services, management and structure, and learning the daily operations, supply and demand, taxation, and international transactions. Students will understand information processing concepts necessary to function in a rapidly changing technological, global society. Integrated throughout the course are communication, critical thinking, interpersonal, and problem solving skills. Through project based learning students will be applying the business concepts they learn to a real business model. As students learn how to be an entrepreneur, they gain skills in decision making, information analysis and presentation, and self-reliance. **30 elective credits**