This course includes a study of the gross structure and function of the human body. Dissection of the cat is made in the laboratory and comparison is made with human structures. The sheep’s heart and brain and the cow’s eye are used for dissection in the laboratory to supplement the study of cat tissues. The interrelationship of anatomy with other biological and other science disciplines is emphasized.

**BIOLOGY (BIOLOGY)**

3 Introduction to Biology (4) UC:CSU IGETC Area 5B
(UC credit limit: No credit for Biology 3 or 25 if taken after Biology 6).
Lecture, 3 hours; Laboratory, 4 hours.

Introductory organismal plant and animal biology for non-majors with an emphasis on scientific methodology and basic biological principles. Topics include basic inorganic, organic and biochemical principles, structure and function of bacteria, plant and animal cells and tissues, energy systems of photosynthesis and respiration, cellular division, genetics and inheritance including Mendelian Punnett square problem solving, its application to normal and abnormal human genetic conditions, evolution and classification of monera, viruses, protista, fungi, plants and animals, diversity, behavior, and ecology of communities. The anatomy and physiology of plant and animal systems, development, growth and reproduction, transport systems, nutrition, and immunity are emphasized. One hour per week is used as a to-be-arranged (TBA) lab supplemental hour using the biology PLATO software and/or biology videos and field trips. This course is designed to meet the content and pedagogy standard in science for the multiple-subject teaching credential.

6 General Biology I (5) UC:CSU IGETC Area 5B
(UC credit limit: No credit for Biology 3, 25, or 111 if taken after Biology 6).
Prerequisite: Chemistry 65 and Mathematics 125.
Lecture, 3 hours; Laboratory, 7 hours.

This course is the first semester of general introduction to biological principles designed for biology majors. Lecture focuses on concepts which are common to all biological organisms. Biological molecules, cell structure and function, bio-energetics, molecular and organismal genetics, evolution and biosystematics are discussed. Laboratory includes exercises illustrating lecture principles and procedures used in modern biotechnology. An additional hour is required which covers some of the tools necessary to becoming a professional biologist. Included is the writing of a curriculum vitae, writing of scientific papers, and readings in the history of biology.

7 General Biology II (5) UC:CSU IGETC Area 5B
Prerequisite: Biology 6.
Advisory: English 101.
Lecture, 3 hours; Laboratory, 7 hours.

This majors course is a continuation of Biology 6. It presents topics such as: introductions to viruses, bacteria, protists, plants and animals; phylogenetic relationship between plant structure and function; reproduction and development of plants (with emphasis on angiosperms); structure and function of animal systems (with emphasis on the human); behavior; and physical and biological factors important in ecology.
This course introduces students to the major health issues facing Latinos/Latinas and other underrepresented minorities in Los Angeles County. This course addresses health disparities, the current health delivery system including underrepresented minority shortages, population projections, population characteristics, birth rates and outcomes, causes of death and death rates, patterns of reportable diseases, service utilization, patterns of immigration, health insurance, provider training, risk behaviors, and chronic disease will be surveyed. Students are introduced to specific disease and health entities of underrepresented minorities including cancer, diabetes, AIDS, mental health, teen pregnancy, domestic violence, adolescent risk behavior, birth and death rates, and population characteristics.

185 Directed Study - Biology (1) CSU RPT2
285 Directed Study - Biology (2) CSU
385 Directed Study - Biology (3) CSU

Note: Concurrent enrollment in a biological science course or demonstration of comparable skills.
Conference, 1 hour per week per unit.

The above courses provide an opportunity for students to gain additional experience in laboratory skills and applications of biological science concepts and principles.
Credit Limit: A maximum of 6 units in Directed Study may be taken.

Note: UC Credit for variable topics courses in this discipline is given only after a review of the scope and content of the course by the enrolling UC campus. This usually occurs after transfer and may require recommendations from faculty. Information about internships may also be presented for review, but credit for internships rarely transfers to UC.

**ELECTRON MICROSCOPY (ETN MCR)**

2 Principles of Histochemistry (4)
Prerequisites: Biology 3 or higher; Chemistry 51 or higher.
Lecture, 3 hours; Laboratory, 5 hours.

The primary objective of histochemistry is to microscopically study the structural relationships of tissues in organisms including protozoa, fungi, plants, and animals to gain an insight into how these organisms function. The microscopic examination of living cells/tissues is limited by the transparency of the cellular components, and not normally differentiated and contrasted from each other. This course includes the general principles for the sectioning of cells and tissues for microscopic histological study. These techniques include basic cell and tissue chemistry, selecting and obtaining tissue samples, chemical and physical fixation, dehydration, infiltration, embedding, sectioning or microtomy, staining to add contrast to tissues, and observation of prepared microscopic slides. This training involves manual and automated processing techniques. Special staining methods of cellular components, such as the cell nucleus, cytoplasm and cellular matrices are also discussed. Students of histochemistry will be sufficiently trained to enter a competitive job market of histotechnology.

3 Biological Applications of Electron Microscopy (4)
Prerequisites: Biology 3 or higher; Chemistry 51 or higher.
Lecture, 2 hours; Laboratory, 6 hours.

This course emphasizes the techniques of specimen sampling, chemistry of fixation, dehydration, embedding, ultrathin sectioning, staining, and electron microscope specimen examination. The molecular and ultrastructural aspects of cells and tissues relating to the concepts of structure and function in life events are presented. In addition, the optical principles of light microscopy and electron microscopy are discussed. The use and processing of photography for electron microscopy is also incorporated.
7 Principles of Histology (4) CSU  
Prerequisites: Biology 6 or Anatomy 1 or Physiology 1, and Chemistry 65 or Chemistry 101.  
Lecture, 2 hours; Laboratory, 4 hours.  
This course surveys human cells, tissues and organ systems. Basic histochemistry and specific stains for each cell, tissue and organ will be discussed in detail. Biochemical principles as pertaining to the structure and function of cells, tissues and organs are presented. Developmental biology and embryology are discussed whenever appropriate, as they pertain to adult structures. Cell, tissue and organ changes and development, in the dimension of time and differentiation are covered.

8 Photography for Electron Microscopy (2)  
Lecture, 1 hour; Laboratory, 2 hours.  
This course presents an introduction to the photographic principles used in electron microscopy including darkroom printing, preparing micrographs for publication, and macrophotography. Photograph slide presentation preparation and PowerPoint presentations are covered as well as desktop publication techniques. Photographic techniques include negative recording, improving resolution and contrast, commercial films, developing, troubleshooting, enlarging, processing, and photograph printing. Black and white along with color photography is presented.

10 Principles and Techniques of Scanning Electron Microscopy (3)  
Prerequisite: Biology 3 or Biology 111; Chemistry 65 or Chemistry 101; Mathematics 115 may be taken concurrently.  
Lecture 2 hour; Laboratory, 3 hours.  
Theory, operational principles, and general maintenance of the scanning electron microscopy are presented. Emphasis is given to the techniques of biological and non-biological specimen preparation currently employed in modern metallurgy, integrated circuit analysis, biomedical research, clinical diagnosis, and in other industrial applications.

12 Cell Biology Techniques (4)  
Prerequisite: Biology 3 or Biology 6 and Chemistry 101.  
Lecture, 2 hours; Laboratory, 6 hours.  
In this course the methods of cellular extraction, cell isolation and cell culture are emphasized. Current concepts of cell growth, development, differentiation, and animal cell cloning are discussed together with a presentation of short-term cell culture applications.

13 Biological Applications of Electron Microscopy (4)  
Prerequisite: Biology 3 or 6, and Chemistry 101.  
Lecture, 2 hours; Laboratory, 6 hours.  
This course emphasizes the principles and techniques of scanning and transmission electron microscopy, specimen preparation, fixation, dehydration, embedding, sectioning and microscopic examination. Photographic application is also incorporated. The molecular and ultra structure aspects of cells and tissues relating to the concepts of structure and function are emphasized.

14 Electron Microscopy Recombinant DNA Techniques (4)  
Prerequisite: Biology 6 or Microbiology 1, and Chemistry 101.  
Lecture, 2 hours; Laboratory, 6 hours.  
This course presents up-to-date reviews of the state of techniques dealing with molecules, DNA extraction, DNA restriction analysis, and colony transformation.

15 Special Techniques of Electron Microscopy (4)  
Prerequisite: Electron Microscopy 13.  
Note: Qualifying examination is required.  
Lecture, 2 hours; Laboratory, 6 hours.  
This course covers special techniques for scanning electron microscopy and transmission electron microscopy currently employed in biomedical research and diagnostic pathology. Immunocytochemical techniques are also included. In addition, routine service and maintenance of the scanning and transmission electron microscopes are emphasized.

16 Histotechnology (4)  
Prerequisite: Biology 3 or 6, and Chemistry 101.  
Lecture, 2 hours; Laboratory, 6 hours.  
This course provides detailed studies of immunochemical stainings for cells and tissues. Biochemical and functional correlations will be emphasized.

17 Immunochemistry (4) CSU  
Prerequisites: Biology 6 or Biology 3, and Chemistry 51.  
Lecture 2 hours; Laboratory 6 hours.  
This course emphasizes immunology, histochemistry, and immunochemistry. Current concepts and application of specific immune responses, antibody production, and antibody functions are discussed. Monoclonal antibody production and cell cloning are also presented.

18 Photomicroscopy (2) CSU  
Lecture, 1 hour; Laboratory 3 hours.  
This course is designed for industrial, medical, and scientific illustrations of photomicroscopy. Attention is given to the techniques of visual aid production for lecture materials; public demonstration and publications.

20 Microanatomy (4) CSU  
Lecture, 3 hours; Laboratory, 5 hours.  
This course presents a microanatomic study of the structure and function of cells, tissues and their integrations from gametogenesis through organogenesis. Emphasis is placed on cell and tissue differentiation as demonstrated by immunocytochemistry.

185 Directed Study - Electron Microscopy (1) RPT2  
285 Directed Study - Electron Microscopy (2)  
385 Directed Study - Electron Microscopy (3)  
Prerequisite: Electron Microscopy 3 and 5.  
Directed Study Conference 3 hours.  
The above courses allow students to pursue Directed Study in Electron Microscopy on a contract basis under the direction of a supervising instructor.

This above courses are designed to provide a review of electron microscopy technical concepts and procedures. Preparation of required examination quality materials for the Electron Microscopy Society of America (EMSA) certification also is considered.

Credit Limit: A maximum of 6 units in Directed Study may be taken.
EMERGENCY DEPARTMENT ASSISTANT (EDA)

9 Emergency Department Assistant/First Responder (4)
Lecture, 3 hours; Laboratory, 3 hours.

This course provides a basic foundation in emergency medical life-saving procedures. The major portion of this course is directed towards the standardization of the training of emergency service personnel/first responders and those individuals requiring knowledge of effective life-saving principles and procedures. An Emergency Department Assistant course Certificate is granted only to individuals who satisfactorily complete all aspects of physical skills proficiency and written test requirements. Individuals who successfully complete the course are eligible to take the National Registry First Responder examination.

HEALTH INFORMATION TECHNOLOGY (HTHTEK)

100 Health Information Technology Survey (3) CSU
Lecture, 2 hours; Laboratory, 3 hours.

This is an introduction to health information technology. It emphasizes technical evaluation and concurrent completion of the medical/health record as required by Federal and State Regulations and by voluntary accrediting bodies and the maintenance and preservation of health information in acute hospitals.

103 Introduction to ICD-9-CM Coding (3)
Prerequisite: Health Information Technology 133.
Corequisite: Health Information Technology 234.
Advisory: Health Information Technology 100, 234 and Anatomy 1 or Biology 20.
Lecture, 2 hours; Laboratory, 2 hours.

This course includes an introduction to medical nomenclatures and classification systems and their use. Emphasis is placed on learning the principles of coding the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). The principles of indexing and coding for prospective payment DRGs (Diagnosis Related Groups) are also introduced.

105 Health Information In Alternate Healthcare Settings (2) CSU
Lecture, 1 hour; Laboratory, 2 hours.

This course includes topics such as the organization, structure, and functions of ambulatory care facilities, psychiatric facilities, long-term care facilities and home healthcare. Emphasis is placed on the requirements for completion of patient records.

106 Hospital Ethics and Law (2)
Prerequisite: Health Information Technology 100.
Lecture, 2 hours.

This course provides an introduction to the legal system related to healthcare Subject, including the Healthcare Insurance Portability and Accountability Act (HIPAA.) regulations regarding privacy and security of health information. Topics include: introduction to the legal and court systems, addressing liability, consents for healthcare and release of information from the patient records, computerization of patient records, and ethical standards of healthcare.

110 Ambulatory Care Coding (3)
Prerequisites: Health Information Technology 103, 133, and Anatomy 1.
Lecture, 2 hours; Laboratory, 2 hours.

This course presents applications of the principles of coding ICD-9-CM to ambulatory care and in depth coverage of


111 Patient Care Insurance Billing (4)
Lecture 2 hours; Laboratory 4 hours.

This course is designed to introduce medical billing techniques, and how to follow-up and collect billed claims. The internship/practicum component provides opportunities to learn how to complete and itemize statements for various types of insurance plans. Review of insurance cards, hands-on computer applications, and HCFA 1500 and UB92 forms with exposure to software and superbills also are considered.

133 Medical Terminology (3)
Advisory: Anatomy 1, Biology 20, or Health Information Technology 120.
Lecture, 3 hours.

This course is designed for students with a biological science background who wish a comprehensive course in medical terminology. Topics presented include word roots, prefixes and suffixes, abbreviations and definitions organized by body systems. Pronunciation and spelling are emphasized throughout the course.

202 Directed Practice for Coding Specialists (4)
Corequisites: Computer Science Information Technology 201 and Computer Science Information Technology 291.
Lecture, 1 hour; Laboratory, 9 hours.

This course is designed to provide practice in coding and abstracting current inpatient and outpatient medical records in health facilities. At the completion of this course, the student should be ready for employment as a coding specialist.

207 Introduction to Health Statistics (3)
Prerequisites: Health Information Technology 100 and Mathematics 105 or 115, Health Information Technology 133 and Computer Science Information Technology 201.
Lecture, 2 hours; Laboratory, 2 hours.

This course is an introduction to basic health statistics using both manual and computerized compilations. The treatment of vital statistics includes preparation of live birth, fetal death and death certificates. Class assignments include abstracting data from medical records and preparation of reports using descriptive statistics.

208 Introduction to Pharmacology (1)
Prerequisites: Health Information Technology 133 and Anatomy 1.
Corequisite: Health Information Technology 234.
Lecture, 1 hour.

This is a comprehensive, yet concise introductory course to medications. The student will study the history, purpose, types, administration, side effects, and interactions of medications currently used in healthcare.

215 Advanced Inpatient Coding and Abstracting (3) CSU
Prerequisites: Health Information Technology 103, 110, 133, and 234.
Advisory: Computer Science Information Technology 201.
Lecture, 2 hours; Laboratory, 2 hours.

This course covers the principles of coding for prospective payment Diagnosis Related Groups (DRGs) with usage of the DRG grouper. Retrieval and use of data from indexes and the use of several different types of nomenclatures and classification systems are also reviewed.
221 Quality Management and Leadership (3)
Prerequisites: Health Information Technology 100, 103, 106, and 133.
Advisory: Health Information Technology 207, 215, and 234.
Lecture, 3 hours.

This course covers management of the quality of care including continuous quality improvement, quality assessment, risk management, medical staff monitoring and evaluation procedures and credentialing. Also included are federal regulations regarding prospective payment, PROs, and methods of reimbursement.

222 Health Information Services Organization and Management (3)
Prerequisites: Health Information Technology 100, 103, and 106; Computer Science Information Technology 201 and 291.
Lecture, 3 hours.

This course presents basic principles of management and supervision of health information services, with special attention to computer applications. Work simplification, in-service education, writing of job descriptions and procedures, forms revision and control, justification for and selection of supplies and equipment are emphasized.

234 Introduction to Pathology (5)
Prerequisite: Health Information Technology 133, Anatomy 1 or Biology 20.
Advisory: Physiology 1.
Lecture, 5 hours.

This course introduces general aspects of pathogenesis of diseases. The cause, effect and treatment of common diseases are emphasized. Specific laboratory tests and the applications of medical terminology also are discussed.

241 Directed Practice in Health Information Procedures II (4)
Prerequisites: Health Information Technology 100, 103, 106, and 110.
Corequisites: Health Information Technology 207, 215, 221 and 222.
Laboratory, 9 hours; Discussion, 1 hour.

This course gives the student additional experience in medical record procedures in acute hospitals. Clinical experiences in skilled nursing facilities, psychiatric facilities, home care agencies, and ambulatory care facilities is also included.

941 Cooperative Education - Health Information Technology (3)
CSU RPT3
Note: Requires 15 to 19 hours per week; paid employment related to the occupational major and enrollment in at least 7 units (which include Co-op Ed).

This course offers advanced supervised training in an employment area that will enhance the student’s educational goals on campus.

MICROBIOLOGY (MICRO)

1 Introductory Microbiology (5) UC:CSU IGETC Area 5B
Prerequisites: Chemistry 51 and Biology 3.
(UC credit limit: Maximum credit 1 course from Microbiology 1 and 20)
Lecture, 3 hours; Laboratory, 6 hours.

This is an introductory microbiology course developed to prepare students for careers in the biological sciences, medicine, dentistry, and allied health professions. This course explores the early history of microbiology, microbial classification, morphology, physiology and genetics. Emphasis is given to host and pathogenic microbe interactions, immunology, virology, and the effects of physical and chemical agents on microorganisms. Attention is also given to the microbiology of the air, water, soil, milk and dairy products. The laboratory emphasizes fundamental microbiological techniques, concepts, and applications as well as current molecular diagnostic methods in microbial genetics and immunology.

20 General Microbiology (4) UC:CSU IGETC Area 5B
Advisory: Chemistry 51.
(UC credit limit: Maximum credit 1 course from Microbiology 1 and 20)
Lecture, 3 hours; Laboratory, 3 hours.

This course deals with the major fundamentals, principles and techniques of microbiology and its scope in today’s world. Attention is also given to the scientific method, the nature of microorganisms and selected aspects of molecular biology, microbial metabolism and genetics. Common infectious diseases, the nature of disease processes, immunology and the control of communicable diseases are covered. Procedures for disinfections and sterilization techniques are emphasized. The industrial uses of microorganisms and current topics in genetic engineering, microbial interferon and hormone production are discussed. Microorganisms are compared to the processes of other forms of life throughout the course.

PHYSIOLOGY (PHYSIOL)

1 Introduction to Human Physiology (4) IGETC Area 5B
Prerequisites: Anatomy 1 and Chemistry 51 or higher.
(UC credit limit: Physiology 1 and Anatomy 1 combined is equivalent to Biology 20, maximum credit 8 units)
Lecture, 3 hours; Laboratory, 3 hours.

Human physiology is the study of the functions of the body. It covers all major systems of the body including the nervous, musculo-skeletal, circulatory, respiratory, digestive, urinary, endocrine, and reproductive systems. Emphasis is given to the interactions and integration of multi-systems which are required to maintain homeostasis which is essential for life. Microscopic examination of selected organs and tissues, as well as laboratory measurements of physiological functions, are covered during the laboratory sessions.

6 Anatomy and Physiology (6) CSU
Lecture 4 hours; Laboratory 6 hours.

This course is designed for majors in the paramedical, preprofessional programs such as nursing, respiratory therapy, medical records, physical therapy, as well as other programs of instruction and training requiring a solid foundation in the principles of anatomy and physiology. The relationship of anatomical concepts and principles to human activities is emphasized by systematically integrating the fundamentals of human anatomy with the fundamentals of cellular and organ system physiology.

385 Directed Study - Physiology (3) CSU
Conference 1 hour per week per unit.

This course allows students to pursue Directed Study in Physiology on a mutually agreeable contract basis under the direction of a supervising instructor.

Credit Limit: A maximum of 6 units in Directed Study may be taken.
RESPIRATORY THERAPY (RESP TH)

1 Introduction to Respiratory Therapy (1)
Lecture, 1 hour.
This course presents an introduction to the profession of respiratory therapy with emphasis on the duties, responsibilities, and qualifications of a respiratory therapist. Elementary lung disease processes and basic blood gas interpretation are also described.

2 Fundamentals of Respiratory Therapy (4)
Prerequisites: Anatomy 1 and Chemistry 51 or higher.
Lecture, 3 hours; Laboratory, 3 hours.
This is a course dealing with the structure and functions of respiratory therapy equipment. It also acquaints the student with the maintenance and minor repair of most of the equipment used in the profession of respiratory care. Students are expected to be able to select, assemble, and correct malfunctions on most equipment used to provide respiratory care.

3 Applications of Respiratory Therapy & Clinical Experience I (5)
Prerequisites: Satisfactory completion of Anatomy 1, Physiology 1 and Respiratory Therapy 15.
Corequisite: Respiratory Therapy 4.
Lecture, 3 hours; Laboratory, 12 hours.
Students receive instruction in the clinical application of gas therapy, aerosol and humidity therapy, and hyperinflation therapy and clinical experience. Clinical applications of respiratory drugs also are presented. Students interpret all data to determine the appropriateness of the prescribed respiratory care, and participate in the development of the respiratory care plan.

4 Applications of Respiratory Therapy & Clinical Experience II (5)
Prerequisites: Satisfactory completion of Anatomy 1, Physiology 1 and Respiratory Therapy 15.
Corequisite: Respiratory Therapy 3.
Lecture, 3 hours; Laboratory, 12 hours.
All aspects of mechanical ventilation and adult intensive respiratory care are presented. Clinical experience is acquired. Respiratory care students are expected to be able to initiate, conduct and modify prescribed therapeutic procedures. In addition, students maintain patient records and communicate relevant information to the healthcare team.

5 Applications of Respiratory Therapy & Clinical Experience III (5)
Prerequisites: Satisfactory completion of Respiratory Therapy 3, 4, and 15.
Corequisite: Respiratory Therapy 11.
Lecture, 3 hours; Laboratory, 12 hours.
Pulmonary function testing, blood gas analysis, and advanced ventilator care are presented. Students evaluate all data to determine the appropriateness of the prescribed respiratory care plan, and participate in the development of the respiratory care plan.

6 Respiratory Physiology (4)
Prerequisites: Anatomy 1, and either Chemistry 51 or higher.
Lecture, 4 hours.
This course presents the physiology of the cardiopulmonary system from a clinical perspective including basic anatomy, pulmonary ventilation, diffusion of gases, pulmonary circulation, ventilation/perfusion balance, blood gas transport, mechanics of breathing and neural control of breathing.

Emphasis is placed on bedside calculations that are used in the management of respiratory patients.

7 Applied Medicine and Pathology (3)
Prerequisites: Anatomy 1, Respiratory Therapy 6, and either Chemistry 51 or higher.
Corequisite: Respiratory Therapy 23.
Lecture, 3 hours.
The pathology, diagnosis, and treatment of the common diseases and disorders of the cardiovascular, respiratory and neuromuscular systems are covered in detail. Techniques of laboratory evaluation and specific monitoring methods are discussed. The biochemistry of anti-asthmatic drugs are covered in detail.

11 Applications of Respiratory Therapy & Clinical Experience IV (5)
Prerequisites: Satisfactory completion of Respiratory Therapy 3, 4 and 15.
Lecture, 2 hours; Clinical Experience, 13 hours.
The student receives instruction in IPPB Therapy, Chest Physical Therapy, and Airway Management. Respiratory care students are expected to initiate, conduct, and modify prescribed therapeutic procedures, and to assist the physician performing special procedures. Pulmonary rehabilitation and home care are also among the responsibilities expected of the student.

15 Introduction to Clinical Experience (4)
Prerequisites: Satisfactory completion of Respiratory Therapy 1 and 2, and either Chemistry 51 or higher; Anatomy 1; Physiology 1; and Microbiology 20.
Laboratory, 11 hours.
This course provides clinical insight in the duties of a respiratory therapist and an introduction to patient relationships. Sterilization methods, medical gas therapy and aerosol therapy are introduced. This course is offered only in the summer.

21 Physics for Respiratory Care (3)
Lecture, 3 hours.
This course presents an overview of the principles of physics that apply to respiratory care equipment, technology, and patient care including the behavior of gases, electricity and electrical safety. Internal heat, temperature scales, and measurement are covered in detail. Molecular phenomena such as osmosis and dialysis, and the mechanics of the cardiovascular and respiratory systems are applied to bedside patient care. Principles of electricity and hospital electrical safety from both a patient and practitioner perspective are emphasized.

23 Advanced Respiratory Pathophysiology (1) CSU
Prerequisites: Anatomy 1, Respiratory Therapy 6, and either Chemistry 51 or higher.
Corequisite: Respiratory Therapy 7.
Lecture, 1 hour.
The pathology, diagnosis, and treatment of the common diseases and disorders of the cardiovascular and neuromuscular systems are covered in detail. Techniques of laboratory evaluation, and specific monitoring methods are discussed. Pharmacology of cardiac anti-arrhythmia drugs are covered in detail.
27 Physician Respiratory Care Clinical Rounds I (1) CSU
Prerequisites: Anatomy 1, and either Chemistry 51 or higher.
Laboratory, 4 hours.

This course provides a hospital setting in which the Respiratory Care student accompanies a Physician on clinical rounds to determine the appropriateness of the prescribed respiratory care plan. The student also participates in the development of the respiratory care plan.

28 Physician Respiratory Care Clinical Rounds II (1)
Prerequisites: Anatomy 1, and either Chemistry 51 or higher.
Laboratory, 4 hours.

This course provides additional hospital settings in which the Respiratory Therapy student accompanies a Physician on clinical rounds to determine the appropriateness of the prescribed respiratory care plan for individual patients. The student also participates in the development and applications of the respiratory care plan.

29 Neonatal and Pediatric Respiratory Therapy (4) CSU
Prerequisites: Anatomy 1, and either Chemistry 51 or higher.
Lecture, 4 hours.

This course presents a detailed treatment of prenatal development, high risk pregnancy and normal labor and delivery.

Neonatal and pediatric diseases and disorders are described with an emphasis on the respiratory care interventions, techniques and equipment used in neonatal and pediatric patient care.

30 Adult Critical Care Monitoring and Diagnostics (3)
Prerequisites: Anatomy 1, and either Chemistry 51 or higher.
Lecture, 3 hours.

This course presents current techniques of monitoring the critically ill patient, including electrocardiography, cardiac output, hemodynamic monitoring, nutritional assessment, oximetry, capnography and pulmonary function testing. Cardiovascular pharmacology is introduced together with advanced cardiac life support (ACLS) treatment algorithms.

31 Neonatal Resuscitation (1) CSU
Prerequisites: Respiratory Therapy 15, 16 and 29.
Lecture, 1 hour.

This course covers neonatal resuscitation techniques. The topics presented include the knowledge and skills required to earn neonatal resuscitation program (NRP) certification by the American Academy of Pediatrics.

Laila Hamideh admits she is happiest when she is learning something new. When she and her husband moved to Monterey Park, ELAC was an obvious choice because it was close to home and her children’s schools. She was pleasantly surprised to find the mathematics and science courses were challenging and they inspired her. She was initially interested in respiratory therapy because her son has exertion asthma and her husband is pre-asthmatic. She wanted to learn how to help them breathe better and instead, found a rewarding career.

“During the first year, respiratory therapy students take science and theory courses. During the second year we do clinical training in hospitals. The ELAC program has such a good reputation that doctors and nurses really want to work with us. It was scary working with patients at first but everyone in the hospital was so helpful that I quickly relaxed. I want to do everything right and feel prepared to work in the field.”