

MEDICAL ASSISTING PROGRAM

This program prepares men and women for positions in healthcare areas associated with working in hospitals, doctor's offices, and community medical facilities. This core applies to Options 1 and 2 below.

Core Program

SUBJECT & NO.	COURSE	UNITS
BIOLOGY 25	Human Biology . . . . .	.3
HTHTEK 106*	Hospital Ethics and Law . . . . .	.2
HTHTEK 133	Medical Terminology . . . . .	.3
SPEECH 101	Oral Communication I. . . . .	.3
Total.		11

*This course has a prerequisite.

Option 1 - Medical Assistant

This option is designed to prepare students to perform administrative duties such as scheduling and receiving patients, maintenance of records, insurance matters, assisting with examinations, taking medical histories, and other related duties.

SUBJECT & NO.	COURSE	UNITS
CORE PROGRAM		11
ACCTG 21	Bookkeeping and Accounting I. . . . .	.3
BIOLOGY 50	Allied Health Issues of Under-Served Populations in Los Angeles County . . .3	
CHEM 51*	Fundamentals of Chemistry I . . . . .	.5
EDA 9	Emergency Department Assistant/First Responder . . . . .	.4
HTHTEK 106*	Hospital Ethics and Law. . . . .	.2
MICRO 20	General Microbiology . . . . .	.4
MGMT 31	Human Relations for Employees	
OR		
SUPV 1	Elements of Supervision	
OR		
CO SCI 233	Microcomputer Database Programming . . . . .	.3
CAOT 31	Business English . . . . .	.3
CAOT 32*	Business Communications . . . . .	.3
Total.		41

*This course has a prerequisite or corequisite.

Option 2 - Community Health Worker

Individuals completing the Community Health Worker program are prepared to identify and understand selected health factors underlying a patient's illness and to communicate these factors to the other members of the health team. In addition, the community health worker assists patients and their families: 1) to understand and accept medical treatments; 2) to adjust to permanent as well as temporary effects of illness; 3) to utilize resources such as local agencies assisting in patient recovery and 4) to serve as a liaison between community agencies, hospitals and clinics, and patients.

SUBJECT & NO.	COURSE	UNITS
CORE PROGRAM		11
BIOLOGY 50	Allied Health Issues of Under-Served Populations in Los Angeles County	
OR		
SOC 19	Introduction to the Social Services3	

HEALTH 11	Principles of Healthful Living . . . . .	.3
PSYCH 1	Introduction to Psychology . . . . .	.3
PSYCH 3	Personality and Social Development . . .3	
Subtotal		23

ONE SKILLS CERTIFICATE FROM: 16

Medical Assisting - Community Health Worker		
1. Community Agency Liaison		
2. Family Counseling		
3. Gerontology Aide		
4. Personnel Supervision		
Total.		39

Option 3 - Medical Secretary

This is a program designed to prepare students for secretarial positions in healthcare institutions and medical offices. The medical secretary is frequently required to have technician or nursing training in addition to other secretarial skills.

SUBJECT & NO.	COURSE	UNITS
ANATOMY 1	Introduction to Human Anatomy4	
BUS 38	Business Computations . . . . .	.3
CO SCI 233	Microcomputer Database Programming	4
HTHTEK 100	Health Information Technology Survey .3	
HTHTEK 105	Health Information In Alternate Healthcare Settings . . . . .	.2
HTHTEK 106*	Hospital Ethics and Law. . . . .	.3
HTHTEK 133	Medical Terminology . . . . .	.3
CAOT 3*	Computer Keyboarding III. . . . .	.3
CAOT 31	Business English . . . . .	.3
CAOT 32*	Business Communications . . . . .	.3
CAOT 941	Cooperative Education. . . . .	.4
PSYCH 1	General Psychology I. . . . .	.3

FOUR TO SIX UNITS FROM AMONG THE FOLLOWING: 4-6

PHYSIOL 1*	Introduction to Human Physiology	
BIOLOGY 20*	Human Anatomy and Physiology	
BIOLOGY 50	Allied Health Issues of Under-Served Populations in Los Angeles County	
CHEM 51	Fundamentals of Chemistry I	
HTHTEK 234*	Introduction to Pathology	
MICRO 20*	General Microbiology	
CAOT 23*	Legal Secretarial Procedures I	
CAOT 33	Records Management and Filing	
CAOT 34	Business Vocabulary	
CAOT 39	Word Processing: Keyboarding and Operations	
ENGLISH	English 60s or higher	
Total.		42-44

*This course has a prerequisite.

** This course has an advisory.

RESPIRATORY THERAPY

A Certificate of Achievement for Respiratory Therapy may be applied for upon attaining the Respiratory Therapy Associate of Science degree. Refer to the Associate of Science degree requirements.

ASSOCIATE DEGREE PROGRAMS

Satisfactory completion of all courses with a "C" or better is required for all associate degree programs.

ELECTRON MICROSCOPY TECHNICIAN

The Electron Microscopy program offers exceptional employment opportunities for both men and women desiring positions as technicians in industry, dental and medical schools, hospitals, and a variety of research institutions. Instruction is given in the preparation and the examination of specimens. The basic principles of electron microscopy are also presented.

The essential equipment necessary to educate and train technicians is provided by the college. Such equipment includes two transmission electron microscopes, one scanning electron microscope, a vacuum evaporator, ultra-microtome, a complete photographic laboratory and numerous accessories.

East Los Angeles College is currently one of the few community colleges in California providing this type of program. An Associate in Science degree and a certificate program are offered by the College to prepare and qualify students in this area of specialization. Individuals successfully completing this course of instruction are eligible to apply for the Electron Microscopy Society of America's technician examination.

Associate in Science Degree

Note: *Mathematics 120, 125 and 241, and Physics 11 are prerequisites to Physics 6. See your counselor for assessment.*

First Semester

SUBJECT & NO.	COURSE	UNITS
CHEM 65*	Introductory General Chemistry . . . . .	.4
HEALTH 11	Principles of Healthful Living . . . . .	.3
MICRO 20*	General Microbiology . . . . .	.4
Any Humanities course - Area C . . . . .		.3

Second Semester

CHEM 101*	General Chemistry I . . . . .	.5
BIOLOGY 6*	General Biology I . . . . .	.5
ENGLISH	English 60s or higher . . . . .	.3

Third Semester

BIOLOGY 7*	General Biology II . . . . .	.5
ETN MCR 2*	Principles of Histochemistry . . . . .	.4
ETN MCR 7*	Principles of Histology. . . . .	.4
PHYSICS 6*	General Physics I. . . . .	.4
POL SCI 1	The Government of the United States . . . . .	.3
PHYS ED	Any Physical Education activity course . . . . .	.1

Fourth Semester**SELECT 16 UNITS FROM THE FOLLOWING:**

ETN MCR 3*	Biological Applications of Electron Microscopy	
ETN MCR 8	Photography for Electron Microscopy	
ETN MCR 10*	Principles and Techniques of Scanning Electron Microscopy	
ETN MCR 12*	Cell Biology Techniques	
ETN MCR 13*	Biological Applications of Electron Microscopy	
ETN MCR 14*	Electron Microscopy Recombinant DNA Techniques	
ETN MCR 15*	Special Techniques of Electron Microscopy	
ETN MCR 16*	Histotechnology	
ETN MCR 17*	Immunochemistry	
ETN MCR 18	Photomicroscopy	
ETN MCR 20	Microanatomy	
PHYSICS 7*	General Physics II	
Total.		.64

*This course has a prerequisite.

HEALTH INFORMATION TECHNOLOGY**Associate in Science Degree**

The Health Information Technology Program at East Los Angeles College is accredited by the Council on Accreditation (COA) of the American Health Information Management Association (AHIMA) and the Commission on Accreditation of Allied Health Education Programs (CA.A.HEP). It provides instruction and clinical experience to assist students in developing the technical skills necessary to maintain components of health information systems consistent with the medical, ethical, legal, and administrative requirements of all accreditation and regulatory agencies.

Upon completion of the Health Information Technology Program, one receives an Associate in Science degree and eligibility to write the Accreditation Examination given by the American Health Information Management Association. This program may be completed entirely as an evening student, taking as long as needed on a part-time basis, or it could be completed in as little as two or three semesters by full-time students who have completed prerequisites. Those who complete the program and pass the Accreditation Examination are known as Registered Health Information Technicians (RHTHTEK).

Traditionally, Registered Health Information Technicians have primarily been employed in the health information services (formerly medical record departments) of hospitals. With the rapid expansion of healthcare needs, opportunities for employment are increasing in managed care, ambulatory healthcare facilities and a number of other areas. There is a need for many more Registered Health Information Technicians than are currently available. Registered Health Information Technicians work with all types of health information systems, computerized data and information, including paper medical records. A health record (medical record) is a permanent account of a patient's medical history, evaluation and/or treatment. It is made to preserve information of medical, scientific and legal value. Each record consists of all medical reports which describe the patient's condition and progress. All health facilities maintain and use medical records and/or health records.

A Certificate of Achievement in Health Information Technology is given to those individuals completing the program, and who have a previous associate or baccalaureate degree, and who do not wish to obtain another degree. This Certificate also qualifies one to take the Accreditation Examination. Typing skill of 40 wpm is recommended.

FIRST YEAR**First Semester**

SUBJECT & NO.	COURSE	UNITS
ANATOMY 1**	Introduction to Human Anatomy . . . . .	.4
ENGLISH 101*	College Reading and Composition I . . . . .	.3
HTHTEK 100	Health Information Technology Survey . . . . .	.3
HTHTEK 105	Health Information in Alternate Healthcare Settings . . . . .	.2
HTHTEK 133**	Medical Terminology . . . . .	.3

Second Semester

SUBJECT & NO.	COURSE	UNITS
CO SCI 201*	Introduction to Computers and Their Uses . . . . .	.3

CO SCI 291*	Programming Laboratory . . . . .	.1
HTHTEK 103*	Introduction to ICD-9-CM Coding . . .	.3
HTHTEK 234*	Introduction to Pathology . . . . .	.5
PHYSIOL 1*	Introduction to Human Physiology . . .	.4
PSYCH 1	General Psychology I. . . . .	.3

SECOND YEAR

Third Semester

SUBJECT & NO.	COURSE	UNITS
HTHTEK 106*	Hospital Ethics and Law . . . . .	.2
HTHTEK 110*	Ambulatory Care Coding . . . . .	.3
HTHTEK 202*	Directed Practice for Coding Specialists .4	
HTHTEK 207*	Introduction to Health Statistics . . . .	.3
HTHTEK 208*	Introduction to Pharmacology . . . . .	.1
HTHTEK 215*	Inpatient Coding and Abstracting . . . .	.3
HTHTEK 221*	Quality Management and Leadership . .	.3

Fourth Semester

SUBJECT & NO.	COURSE	UNITS
American Institutions course - Area B1		
CO SCI 200*	Microcomputers in Business . . . . .	.3
HEALTH 2	Health and Fitness	
OR		
HEALTH 8	Women's Personal Health	
OR		
HEALTH 11	Principles of Healthful Living . . . . .	.3
Any Humanities course - Area C		
HTHTEK 222*	Health Information Services Organization and Management . . . . .	.3
HTHTEK 241*	Directed Practice in Health Information Procedures II. . . . .	.4
PHYS ED	Any Physical Education activity course .1	
Total.		.73

*This course has a prerequisite or corequisite.

MEDICAL ASSISTING

Associate in Science Degree

This program prepares men and women for positions in healthcare associated with working in hospitals, doctor's offices, and community medical facilities.

Core Program

SUBJECT & NO.	COURSE	UNITS
BIOLOGY 25	Human Biology . . . . .	.3
HTHTEK 106*	Hospital Ethics and Law. . . . .	.2
HTHTEK 133**	Medical Terminology . . . . .	.3
SPEECH 101	Oral Communication I. . . . .	.3
Total.		.11

*This course has a prerequisite.

**This course has an advisory.

Option 1 - Medical Assistant

This option is designed to prepare students to perform administrative duties such as scheduling and receiving patients, maintenance of records, insurance matters, assisting with examinations, taking medical histories, and other related duties.

SUBJECT & NO.	COURSE	UNITS
CORE PROGRAM		
		11
ACCTG 21	Bookkeeping and Accounting I. . . . .	.3

BIOLOGY 50	Allied Health Issues of Under-Served Populations in Los Angeles County . . .	.3
CAOT 31	Business English . . . . .	.3
CAOT 32**	Business Communications . . . . .	.3
CHEM 51	Fundamentals of Chemistry I . . . . .	.5
EDA 9	Emergency Department Assistant/First Responder . . . . .	.4
MICRO 20**	General Microbiology . . . . .	.4
MGMT 31	Human Relations for Employees	

OR

SUPV 1	Elements of Supervision
--------	-------------------------

OR

CO SCI 233*	Microcomputer Database Programming .4
-------------	---------------------------------------

GENERAL EDUCATION REQUIREMENTS (PLAN B) 18

4 UNITS FROM AMONG THE FOLLOWING:

ANATOMY	1**	
COOP ED	941	
PHYSIOL	1*	
Total.		.62

*This course has a prerequisite.

This course has an advisory.

Option 2 - Community Health Worker

This option prepares students to identify and understand selected health factors underlying a patient's illness and to communicate these factors to the other members of the health team. In addition, the community health worker assists patients and their families: 1) to understand and accept medical treatments; 2) to adjust to permanent as well as temporary effects of illness; 3) to utilize resources such as local agencies assisting in patient recovery; and 4) to serve as a liaison between community agencies, hospitals and clinics, and patients.

SUBJECT & NO.	COURSE	UNITS
CORE PROGRAM		
		11
HEALTH 11	Principles of Healthful Living . . . . .	.3
PSYCH 1	Introduction to Psychology . . . . .	.3
PSYCH 3	Personality and Social Development . .	.3
SOC 19	Introduction to the Social Services . . .	.3

GENERAL EDUCATION REQUIREMENTS (PLAN B) 18

19 UNITS FROM AMONG THE FOLLOWING:

BIOLOGY	50	
CH DEV	1	
EDA	9	
FAM &CS	31	
HTHTEK	100	
MATH	105, 115, 120	
MICRO	20	
PSYCH	11	
SPANISH	8, 14	
Total.		.60

Option 3 - Medical Secretary

This program prepares the student for secretarial positions in hospitals, doctors' offices, clinics and the medical organizations of large corporations or public health services. The medical secretary is frequently required to have technician or nursing training in addition to other secretarial skills.

SUBJECT & NO.	COURSE	UNITS
ANATOMY 1**	Introduction to Human Anatomy . . .	.4
BIOLOGY 50	Allied Health Issues of Under-Served Populations in Los Angeles County . . .	.3
BUS 38	Business Computations . . . . .	.3
CAOT 3**	Computer Keyboarding III. . . . .	.3
CAOT 31	Business English . . . . .	.3
CAOT 32**	Business Communications . . . . .	.3
CO SCI 233*	Microcomputer Database Programming	4
HTHTEK 100	Health Information Technology Survey	.3
HTHTEK 105	Health Information in Alternate Settings	2
HTHTEK 106*	Hospital Ethics and Law. . . . .	.2
HTHTEK 133**	Medical Terminology . . . . .	.3
PSYCH 1	General Psychology I. . . . .	.3

6 UNITS FROM AMONG THE FOLLOWING:

ANATOMY	1**
BIOLOGY	20*
CAOT	23**, 33, 34, 39**
CHEM	51
ENGLISH	61*, 62*, 63*, 65* or 101*
HTHTEK	234*
MICRO	20**

GENERAL EDUCATION REQUIREMENTS (PLAN B) 18

Total. 60

*This course has a prerequisite.

**This course has an advisory.

RESPIRATORY THERAPY**Associate in Science Degree**

This program provides students with a strong academic foundation and the clinical proficiency to utilize modern respiratory devices (under the direction of a physician) in the treatment of respiratory and cardiac ailments. In the Fall 1996 semester, East Los Angeles College and Santa Monica College merged their respective Respiratory Therapy programs. This partnership provides increased access to medical and related clinical resources for students. Under the merged program, all prerequisite science courses and the "First Year" Respiratory Therapy theory courses (with the exception of Respiratory Therapy 2, which must be taken at ELAC) can be taken at either campus. All "second year" Respiratory Therapy courses are taken on the ELAC campus. Students upon completion of the second year, then petition their originating campus for their Associate Degree. Students must submit an Application for Admission and meet the prerequisite requirements for Admission described below.

The Committee on Accreditation for Respiratory Care (CoARC) nationally accredits the Respiratory Therapist Program in conjunction with the Commission on Accreditation of Allied Health Educational Programs (CA.A.-HEP). The Respiratory Care Board of California, under the Department of Consumer Affairs, licenses respiratory care practitioners.

Program Prerequisites: A "C" grade or better is the minimum grade accepted in prerequisites. These courses are required to apply for admission to the Program:

1. Human Anatomy (Anatomy 1)
2. Human Physiology (Physiology 1)
3. Introductory General Chemistry (Chemistry 51 or 65)

4. Speech 101
5. Elementary Algebra (Math 115)

GENERAL EDUCATION ACADEMIC ADVISEMENT: Students must meet with a regular ELAC academic advisor to review their preparation for meeting ELAC's Associate Degree "General Education" requirements. Students may enter the Program without having completed the degree requirements, however, they will not be eligible to graduate from the program until they meet the requirements for the Associate Degree, including General Education areas B1, C, D1 and E2. Students are exempt from taking the Health requirement.

TRANSFER STUDENTS; If any or all of the prerequisite courses or their equivalents have been taken elsewhere, transcripts should be sent to both the ELAC Office of Admissions and the Respiratory Therapy program office located within the Life Sciences department. Students should initiate a "General Petition" in the Admissions Office requesting that credit be granted for those courses which the student feels they are eligible. Supporting documentation should be attached to the General Petition to support the student's request.

APPLICATION SUBMISSION: Students must submit a complete application, including official transcripts, verifying completion of the required prerequisite coursework. Each fall semester, first-year students will be admitted to begin the two-year sequence of coursework. Applications will be considered for admission based on the date a complete application was received.

RESPIRATORY THERAPY ADVISEMENT: Once a student is formally admitted to the program, they will be assigned a Respiratory Therapy advisor. This advisor will work with the student to establish their written "Respiratory Therapy Education Plan". This plan, once established, must be followed by the student.

FIRST YEAR (THEORY)**FALL SESSION**

SUBJECT & NO.	COURSE	UNITS
MICRO 20#	General Microbiology . . . . .	.4
RESP TH 1	Introduction to Respiratory Therapy. . .	.1
RESP TH 6*	Respiratory Physiology . . . . .	.4
RESP TH 29*	Neonatal and Pediatric Respiratory Therapy . . . . .	.4

SPRING SESSION

SUBJECT & NO.	COURSE	UNITS
RESP TH 2#	Fundamentals of Respiratory Therapy . .	.4
RESP TH 7 *	Applied Medicine and Pathology . . .	.3
RESP TH 21**	Physics for Respiratory Care. . . . .	.3
RESP TH 23*	Advanced Respiratory Pathophysiology	.1
RESP TH 30*	Adult Critical Care Monitoring and Diagnostics . . . . .	.3

SECOND YEAR (CLINICAL)**SUMMER SESSION**

SUBJECT & NO.	COURSE	UNITS
RESP TH 15*	Introduction to Clinical Experience . .	.4

Second Year

FALL SESSION

SUBJECT & NO.	COURSE	UNITS
RESP TH 3*	Applications of Respiratory Therapy and Clinical Experience I . . . . .	.5
RESP TH 4*	Applications of Respiratory Therapy and Clinical Experience II . . . . .	.5
RESP TH 27*	Physician Respiratory Care Clinical Rounds I. . . . .	.1
RESP TH 31*	Neonatal Resuscitation . . . . .	.1

SPRING SESSION

SUBJECT & NO.	COURSE	UNITS
RESP TH 5*	Application of Respiratory Therapy and Clinical Experience III. . . . .	.5
RESP TH 11*	Applications of Respiratory Therapy and Clinical Experience IV. . . . .	.5
RESP TH 28	Physician Respiratory Care Clinical Rounds II . . . . .	.1

GENERAL EDUCATION REQUIREMENTS (PLAN B) 10

Total. 64

*This course has a prerequisite.

**A general (non-lab) Physics course may be substituted for this course.

Microbiology 20 and Respiratory Therapy 2 may be taken either semester of "Theory Year".

The following are additional criteria for entry into the "Clinical Year" of the program:

Background Check: Completion of background check will be required prior to entry into the clinical phase of the program. A 10-panel Drug screen will also be required for entry into clinical training.

Health: The student must be free from any condition that would present a health threat to the well-being of the consumer (Title 22, College Regulations, Division 5, Section (a). A complete physical examination, including laboratory test with select immunizations, will be required upon entry into clinical classes.

Special Notes:

1. Respiratory Therapy courses are scheduled sequentially in each semester and must be completed before progressing to the next semester.
2. Malpractice insurance is required for the respiratory program (purchased during the second year of the program).
3. Students transferring from another respiratory therapy program will be evaluated by the Department for respiratory course credit. A general petition form must be completed and submitted to Admissions with syllabi and college catalog course descriptions of the courses. In addition, all transfers must submit a letter from their former respiratory therapy program director stating they are clinically safe.
4. Recency Requirement: Students must have received a grade of C or better in Microbiology 20 and Physiology 1 (or their equivalents) within seven (7) years prior to admission to the Respiratory Therapy program.
5. Supplies, Health and Miscellaneous Requirements: All accepted students must expect to complete a criminal background check. This should be processed during the month of July or August (before entering clinical rota-

tions). Students are also required to purchase lab coats, scrubs (optional), and other materials for their classroom and clinical training.

NON-TRADITIONAL RESPIRATORY THERAPY

Associate in Science Degree

This program is designed for the experienced licensed therapist, who may not have transfer credit in Respiratory Therapy. Graduates of this program are eligible to sit for the advanced Practitioner Examination (RRT), Perinatal/Pediatric Respiratory Care Specialty Examination, and the Certified Pulmonary Function Technologist (CPFT) examinations administered by the National Board for Respiratory Care (NBRC).

Program Prerequisites:

The student must satisfy the following requirements:

1. Be certified Respiratory Therapist having earned a minimum of an associate degree from an entry-level respiratory therapist educational program supported by the Committee on Accreditation for Respiratory Care (CoARC), or its predecessor the Joint Review Committee for Respiratory Therapy Education (JRCRTE), or accredited by the Commission on Accreditation of Allied Health Education Programs (CA.A.HEP)
2. Satisfy all of the same college-level prerequisites described for an applicant to the regular therapist program. In addition, they must also complete the same Microbiology 20 course.
3. Satisfy the current General Education course requirements for an Associate Degree from East Los Angeles College; including General Education areas B1, C, D1 and E2. Students are exempt from taking the Health requirement.
4. Completion of an application for the respiratory therapy program, including official transcripts and course descriptions for those courses the student wishes to transfer to ELAC. Applications can be obtained from the Respiratory Therapy Program Office (323) 265-8813.

*REQUIRED RESPIRATORY THERAPY COURSEWORK: This is evaluated on a course by course basis, depending upon the students previous documented Respiratory Therapy courses. Described below is the typical course work required for this special program:

SUBJECT & NO.	COURSE	UNITS
RESP TH 6*	Respiratory Physiology . . . . .	.4
RESP TH 7*	Applied Medicine and Pathology . . . . .	.3
RESP TH 21	Physics for Respiratory Care. . . . .	.3
RESP TH 23	Advanced Respiratory Pathophysiology .1	
RESP TH 27*	Physician Respiratory Care Clinical Rounds I. . . . .	.1
RESP TH 28*	Physician Respiratory Care Clinical Rounds II . . . . .	.1
RESP TH 29	Neonatal and Pediatric Respiratory . . . . .	.4
RESP TH 30	Adult Critical Care Monitoring and Diagnostics . . . . .	.3

GENERAL EDUCATION REQUIREMENTS (PLAN B) 13

MATH 115 Elementary Algebra
or higher-level course .5

GENERAL EDUCATION REQUIREMENTS (AREA D) 3-7

Total 60

*This course has a prerequisite.

In addition to above classroom work, the advanced standing student is required to enroll in "Independent Study" courses to permit the assignment of clinical practice. The clinical practice requirement will vary, according to the student's documented past clinical experience. The minimum requirements will be for the student to perform critical care practice at one of our clinical affiliates and then pass the same "clinical evaluation" process in critical care required of students pursuing our regular program track. In addition, the advanced standing student will be required to do a "Neonatal ICU" clinical rotation.

TRANSFER STUDENTS: If any or all of the prerequisite courses or their equivalents have been taken elsewhere, transcripts should be sent to both the ELAC Admissions Office and the Respiratory Therapy program office located within the Life Sciences Department. Students should initiate a "General Petition" in the Admissions Office requesting that credit be granted for those courses. Supporting documentation should be attached to the General Petition to support the student's request.

Recency Requirement: Students must have received a grade of C or better in Microbiology 20 and Physiology 1 (or their equivalents) within seven (7) years prior to admission to the Non-Traditional Respiratory Therapy program.

TRANSFER CURRICULUM

Transfer requirements are subject to change. Students should check with a counselor for current transfer information.

BIOLOGY

A major in the biological sciences may emphasize traditional fields of botany, zoology, selected areas of microbiology, or may cut across these traditional lines by emphasizing genetics, evolution, physiology, ecology and molecular biological principles and concepts. The degree in biology is designed specifically to provide breadth and depth in the biological sciences and supporting physical sciences needed by workers in technical fields associated with various aspects of applied biology. It is also intended to provide rigorous training necessary for those wanting to become competent biologists or to pursue graduate or professional work.

CALIFORNIA STATE UNIVERSITY, LOS ANGELES

Bachelor of Science Degree

SUBJECT & NO.	COURSE	UNITS
BIOLOGY 6*	General Biology I . . . . .	.5
BIOLOGY 7*	General Biology II . . . . .	.5
CHEM 101*	General Chemistry I . . . . .	.5
CHEM 102*	General Chemistry II. . . . .	.5
CHEM 201*	Quantitative Analysis I. . . . .	.4
MATH 261*	Calculus I . . . . .	.5
MATH 262	Calculus II . . . . .	.5
PHYSICS 6*	General Physics I. . . . .	.4
PHYSICS 7*	General Physics II . . . . .	.4

CSU GENERAL EDUCATION REQUIREMENTS UP TO 39

CALIFORNIA STATE UNIVERSITY, LONG BEACH

Bachelor of Science Degree

SUBJECT & NO.	COURSE	UNITS
BIOLOGY 6*	General Biology I . . . . .	.5
BIOLOGY 7*	General Biology II . . . . .	.5

CHEM 101*	General Chemistry I . . . . .	.5
CHEM 102*	General Chemistry II. . . . .	.5
MATH 261*	Calculus I . . . . .	.5
MATH 262*	Calculus II . . . . .	.5
PHYSICS 6*	General Physics I. . . . .	.4
PHYSICS 7*	General Physics II . . . . .	.4

CSU GENERAL EDUCATION REQUIREMENTS UP TO 39

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

SUBJECT & NO.	COURSE	UNITS
CORE REQUIREMENTS:		
BIOLOGY 6*	General Biology I . . . . .	.5
BIOLOGY 7*	General Biology II . . . . .	.5
CHEM 101*	General Chemistry I . . . . .	.5
CHEM 102*	General Chemistry II. . . . .	.5
CHEM 211*	Organic Chemistry for Science Major I .5	
MATH 227*	Statistics . . . . .	.4
MICRO 1*	Introductory Microbiology . . . . .	.5
PHYSICS 6*	General Physics I. . . . .	.4

AND

PHYSICS 7*	General Physics II4
------------	------------------------------	----

OR

PHYSICS 21*	General Physics I With Calculus4
-------------	---	----

AND

PHYSICS 22*	General Physics II With Calculus.4
-------------	---	----

UNIVERSITY OF CALIFORNIA, LOS ANGELES

SUBJECT & NO.	COURSE	UNITS
BIOLOGY 6*	General Biology I . . . . .	.5
BIOLOGY 7*	General Biology II . . . . .	.5
BIOLOGY 40	The Science of Biotechnology . . . . .	.3
BIOLOGY 46	Genetic Analysis . . . . .	.3
CHEM 101*	General Chemistry I . . . . .	.5
CHEM 102*	General Chemistry II. . . . .	.5
CHEM 211*	Organic Chemistry for Science Major I .5	
CHEM 221**	Biochemistry for Science Major . . . . .	.5
MATH 261*	Calculus I . . . . .	.5
MATH 262*	Calculus II . . . . .	.5
PHYSICS 21*	General Physics I With Calculus . . . . .	.4

AND

PHYSICS 22*	General Physics II With Calculus.4
-------------	---	----

OR

PHYSICS 1*	Mechanics of Solids . . . . .	.4
PHYSICS 2*	Mechanics of Fluids, Heat and Sound . .4	
PHYSICS 3*	Electricity and Magnetism . . . . .	.4
PHYSICS 4*	Optics and Modern Physics . . . . .	.4

UNIVERSITY OF CALIFORNIA, RIVERSIDE

SUBJECT & NO.	COURSE	UNITS
CORE SEQUENCES:		
CHEM 101*	General Chemistry I . . . . .	.5
CHEM 102*	General Chemistry II. . . . .	.5
CHEM 211*	Organic Chemistry for Science Majors I .5	
CHEM 212*	Organic Chemistry for Science Majors II 5	
MATH 261*	Calculus I . . . . .	.5
MATH 262*	Calculus II . . . . .	.5
PHYSICS 1*	Mechanics of Solids . . . . .	.4
PHYSICS 2*	Mechanics of Fluids, Heat and Sound . .4	
PHYSICS 3*	Electricity and Magnetism . . . . .	.4

OR

PHYSICS 21*	General Physics I with Calculus4
-------------	---	----