

Prerequisite: A minimum grade of 'C' in either MATH 56 or MATH 60, or eligibility determined through the math placement process

Note: May be taken 4 times

Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus

Topics in Mathematics. See Class Schedule for specific topic offered. Course title will designate subject covered.

MATH 200 Introduction to Linear Algebra (3)

3 hours lecture

Prerequisite: A minimum grade of 'C' in MATH 141

Transfer acceptability: CSU; UC; TCSU MATH 250

Matrices, determinants, vectors, linear dependence and independence, basis and change of basis, linear transformations, and eigen values.

MATH 205 Calculus With Analytic Geometry, Third Course (4)

4 hours lecture

Prerequisite: A minimum grade of 'C' in MATH 141

Transfer acceptability: CSU; UC; TCSU MATH 230

Vectors in the plane and space, three-dimensional coordinate system and graphing, vector-valued functions and differential geometry, partial differentiation, multiple integration, and vector calculus.

MATH 206 Calculus With Differential Equations (4)

4 hours lecture

Prerequisite: A minimum grade of 'C' in MATH 205

Transfer acceptability: CSU; UC; TCSU MATH 240

A first course in ordinary differential equations from analytic, geometric, numeric and applied perspectives (including the use of modern computational technology as appropriate). Topics include exact, separable, and linear equations; initial value and boundary-value problems; systems of first-order equations; reduction of order; undetermined coefficients; variation of parameters; series solutions; and Laplace transforms.

MATH 245 Discrete Mathematics (3)

3 hours lecture

Prerequisite: A minimum grade of 'C' in MATH 130 or MATH 140, or a passing score on the appropriate placement test

Transfer acceptability: CSU; UC

The study of propositional and predicate logic, number theory and methods of proof, elements of set theory, relations and functions, the Pigeonhole Principle, sequences, infinite sets, basic counting techniques, permutations, combinations, graphs and trees, and applications directed to the field of computer science.

Medical Assisting (MA)

Contact the Life Sciences Department for further information.

(760) 744-1150, ext. 2275

Office: NS-207A

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

- Administrative Medical Assisting
- Clinical Medical Assisting

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Administrative Medical Assisting
- Clinical Medical Assisting

PROGRAMS OF STUDY

Administrative Medical Assisting

Provides specific skills for entry level positions as an administrative assistant in a physician's office or a medical clinic.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
MA 50 Introduction to Medical Assisting	3
MA 55 Medical Terminology and Anatomy	3
MA 56 Medical Terminology and Anatomy	3
MA 60 Medical Insurance	3
BUS 125 Business English	3
OIS 102 Intermediate Keyboarding	2
OIS 136.1 Word Basic	1
OIS 136.2 Word Intermediate	1
OIS 205 Office Procedures	3
CE 100* Cooperative Education	2
TOTAL UNITS	24

* Cooperative Education must be related to this major.

Clinical Medical Assisting

Provides specific skills for entry level positions as a clinical assistant in a physician's office or a medical clinic.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
MA 50 Introduction to Medical Assisting	3
MA 55 Medical Terminology and Anatomy	3
MA 56 Medical Terminology and Anatomy	3
MA 65 Clinical Assisting: Patient Care	5
MA 66 Clinical Assisting: Diagnostic Procedures	5
MA 70 Supervised Clinical Experience	3.5
ZOO 145 Introduction to Anatomy and Physiology	3
BUS 125 Business English	3
OIS 101* Beginning Keyboarding	2
TOTAL UNITS	28.5 - 30.5

* May be exempt by typing proficiency exam.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

MA 50 Introduction to Medical Assisting (3)

3 hours lecture

History and development of the medical profession and its specialties. Roles and functions of the medical assistant and medical assisting organizations. Principles of interpersonal relationships, professional attitudes, medical ethics, and law. Reception and scheduling of patients.

MA 55 Medical Terminology and Anatomy (3)

3 hours lecture

Basic medical terms with emphasis on word analysis and construction. Overview of anatomy and the pathological, diagnostic, therapeutic, and surgical terms related to the body as a whole and the integumentary, digestive, urinary, musculoskeletal, and male reproductive systems.

MA 56 Medical Terminology and Anatomy (3)

3 hours lecture

Basic medical terms with emphasis on word analysis and construction. Overview of anatomy and the pathological, diagnostic, therapeutic and surgical terms related to the cardiovascular, respiratory, hematologic, endocrine, and female reproductive systems, and to oncology.

MA 60 Medical Insurance (3)

3 hours lecture

Recommended preparation: MA 55 or 56

Provides entry-level skills training in medical insurance billing. Surveys private and government health and accident insurance plans and methods for preparing claim forms. Emphasis on compiling and extracting data for completion of forms.

MA 61 Medical Insurance Coding (3)

2 hours lecture-3 hours laboratory

Prerequisite: A minimum grade of 'C' in MA 55 or 56, or concurrent enrollment in MA 55 or 56

Diagnosis and medical procedure coding utilizing International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and Current Procedural Terminology 4 (CPT-4) coding guidelines. Includes abstracting information from the medical record, utilizing computer coding techniques, and knowledge of strategies to promote accurate reimbursement of medical claims.

MA 65 Clinical Assisting: Patient Care (5)

3 hours lecture-6 hours laboratory

Preparation of patients and assisting physician with examinations, minor surgical procedures, and treatments. Recording medical histories and observations. Principles and methods of aseptic procedures, handling and care of instruments and supplies. Pharmacology with emphasis on preparation and administration of medication.

MA 66 Clinical Assisting: Diagnostic Procedures (5)

3 hours lecture-6 hours laboratory

Laboratory orientation and preparation of patients for diagnostic procedures. Specimen collection and handling. Basic urine and hematological tests. Emergency procedures.

MA 70 Supervised Clinical Experience (3.5)

10½ hours laboratory

Prerequisite: A minimum grade of 'C' in MA 50, 55, 56, 65 and 66. Current CPR Basic 'C' Certificate. A Physical Examination and Physician's Report (free of infectious disease and physically and emotionally able to perform the duties of the MA 70 class). Proof of the following: Tuberculin Test (PPD), Tetanus/Diphtheria immunization, Rubella/Measles Vaccine, and Hepatitis B Vaccine (first in the series of 3 must be received a minimum of 10 days prior to day 1 of MA 70 class). Must be 18 years of age prior to day 1 of clinical experience.

Supervised clinical (back office) experience in the physician's office, clinic, laboratory, or other appropriate health care facility. Students will assist the physician and medical staff to provide patient care, diagnostic procedures, and perform other duties delegated to the entry-level medical assistant with consideration of the ethical and legal implications. Clinical skills not prohibited by California regulations or the Clinical Laboratory Improvement Act of 1988 will be performed.

MA 97 Medical Assisting Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 4 times

Topics in Medical Assisting. See Class Schedule for specific topic offered. Course title will designate subject covered.

Microbiology (MICR)

Contact the Life Sciences Department for further information.

(760) 744-1150, ext. 2275

Office: NS-207A

COURSE OFFERINGS**MICR 110 Microbiology and Foods (3)**

2 hours lecture-2 hours lecture/laboratory

Note: Cross listed as FCS 110**Transfer acceptability:** CSU

Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

MICR 197 Microbiology Topics (.5-4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 4 times**Transfer acceptability:** CSU

Topics in Microbiology. See Class Schedule for specific topic offered. Course title will designate subject covered.

MICR 200 Fundamentals of Microbiology (4)

2 hours lecture-7 hours laboratory

Prerequisite: A minimum grade of 'C' in BIOL 102; or BIOL 200 and CHEM 104 or CHEM 100; or BIOL 100 and CHEM 104 or CHEM 100; or BIOL 105 and CHEM 104 or CHEM 100; or BIOL 101, BIOL 101L and CHEM 104 or CHEM 100

Transfer acceptability: CSU; UC

Fundamentals of microbiology including medical aspects of microbiology.

Multicultural Studies (MCS)

See also **Africana Studies, American Indian Studies, American Studies, Chicano Studies, Judaic Studies**

Contact the Multicultural Studies Department for further information.

(760) 744-1150, ext. 2206

Office: ST-28

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).

• World Cultures

PROGRAM OF STUDY**World Cultures**

The certificate program in World Cultures will encourage students to study questions of culture, race, and ethnicity both globally and in the United States. Through the domestic, as well as international, exploration of race, ethnicity, and culture, students are encouraged to understand how international events affect internal social practices and individual behavior, and how these processes ultimately determine race and ethnic relations. The certificate program will address questions such as: What is the significance between culture and society? What is the nature of social and/or ethnic conflict? Can the exploration of race, ethnicity, and culture provide the understanding necessary for an interactive exchange between various ethnicities, rather than a focus on those differences merely as categories for identifying "otherness?"

CERTIFICATE OF ACHIEVEMENT*

Program Requirements		Units
AS 100	Introduction to the Historical Legacy of Africana Peoples	3
CS 100	Introduction to Chicano Studies	3
JS 106 /RS 106	Introduction to Judaism I	3
MCS 100	Introduction to Multicultural Studies	3
MCS 122	Survey of Middle Eastern History	3
MCS 165	Introduction to Asian American Studies	3
TOTAL UNITS		18

* World Cultures Certificate of Achievement pending approval by the California Community Colleges System Office at the time of catalog publication.

COURSE OFFERINGS**MCS 100 Introduction to Multicultural Studies (3)**

3 hours lecture

Transfer acceptability: CSU; UC

Social, cultural and political awareness of diverse national and international systems of thought and multicultural groups as revealed through their social institutions and cultural traditions emanating from family, community and nation - state.

MCS 110 Diverse Cultures in America Today (3)

3 hours lecture

Note: Cross listed as AMS 110**Transfer acceptability:** CSU; UC