### MATH 200 Introduction to Linear Algebra

3 hours lecture

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

Transfer acceptability: CSU; UC

C-ID 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

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 hours lecture

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

Transfer acceptability: CSU; UC

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 hours lecture

Prerequisite: A minimum grade of 'C' in MATH 130 or MATH 140 Transfer acceptability: CSU; UC

The study of prepositional 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

See Business (BUS)

Medical Assisting Clinical not offered at Palomar College

# 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**

2 hours lecture - 3 hours 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.

### 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)

(3)

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; or ZOO 203

Transfer acceptability: CSU; UC

(3)

(4)

(3)

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: MD-354

### 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

An investigation of prevalent cultural trends in four groups of diverse ethnic and cultural backgrounds in America -- African Americans, Latinos, Chinese, and people of Jewish heritage -- since World War II. Emphasis will be placed on the literary, musical, and artistic expressions of their heritage, social conditions, struggle to become part of the main culture, and response to prejudice, racial, and religious discrimination. Selections dealing with social conditions will include such diverse issues as family life, intergenerational conflicts, and religious traditions.

#### MCS 115 Graphics and Media: A Multicultural Perspective (3) 3 hours lecture

Note: Cross listed as GC 115

Transfer acceptability: CSU; UC

An introduction to the impact of media technology on the visual arts from a multicultural perspective. Includes print, Internet, multimedia, and game design. Embraces the diversity and multicultural perspectives that reflect American demographics by presenting individual and collaborative contributions as well as strategies for designing niche marketing and advertising graphics for a multicultural society. Addresses the impact of globalization. Examines gender, ethnicity (African American, American Indian, Asian-Americans and/or Pacific Islanders, and Mexican American in particular), age, sexual orientation, and universal access for people with impairments.

MCS 120	The Middle East: From Ancient Cultures	
	to Modern Influences	

3 hours lecture Transfer acceptability: CSU; UC

Explores the development of Middle Eastern cultures and traditions beginning with Mesopotamia and Egypt becoming the cradles of Western civilization to the present. Emphasis on the cultural milieu in which the three monotheistic religions, Judaism, Christianity and Islam, were born. The focus will be on cultural traditions as opposed to religious aspects. The influences of Greek, Roman, and Eastern civilizations in the region, including literary, philosophical, musical, and artistic creations by Middle Easterners in the past century. Discussions will also focus on the current cultural conflicts between religious traditions and cultural groups.

(3)

#### MCS 122 Survey of Middle Eastern History 3 hours lecture

Transfer acceptability: CSU; UC

A survey of the history, cultures and religions of the Arab world including the emergence of Islam as a major world religion, and the impact of the Arab conquests on the Mediterranean world.

### **MCS 124 Islamic Cultures and Traditions** 3 hours lecture Note: Cross listed as RS 124

Transfer acceptability: CSU; UC

An introductory course designed for students with a general interest in the Islamic world, including its history and cultural traditions. Examines the main social, traditional and legal institutions of Islam.

#### MCS 125 Women, Culture, and Islam (3) 3 hours lecture

### Transfer acceptability: CSU; UC

This course examines the history of women in Islamic societies from the advent of Islam in the 1st AH/7th CE to present day. Drawing on a variety of primary and secondary sources in written texts and from the Internet, this course explores the role of women in Islam as a religion, cultural experience, and tradition, along with the wide range of women's experiences throughout different periods of history and in diverse Muslim societies.

3 hours lecture	MCS 157	Theatre and Social Justice	(3)
	3 hours lecture		

Note: Cross listed as TA 157 Transfer acceptability: CSU

The study and practice of theatre as a vehicle for understanding global conditions of social injustice and working to create justice in local communities.

#### MCS 165 Introduction to Asian American Studies (3) 3 hours lecture

### Transfer acceptability: CSU; UC

This course is an introduction to Asian American Studies. It focuses on the lives and experiences of Asian Americans in the United States. It surveys the history of immigration and cultural assimilation of the different Asian American groups in the U.S. As such, the course will utilize historical perspectives, literature, and film to examine the Asian American experience and the changing roles and contributions of Asian Americans in American society.

#### MCS 197 (.5 - 4) **Multicultural Studies Topics**

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

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

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

#### **MCS 200** Race, Class, and Ethnic Groups in America (3) 3 hours lecture

Note: Cross listed as AMS 200/SOC 200 Transfer acceptability: CSU; UC

C-ID SOCI 150

This course is designed to introduce the topics of intergroup relations in general to superordinate-subordinate relations in particular, as exemplified in various racial, ethnic, social class, and cultural groups. Emphasis is primarily on contemporary relations in the United States, although a comparative perspective is also offered.

## **Music (MUS)**

(3)

(3)

Contact the Performing Arts Department for further information. (760) 744-1150, ext. 2316 Office: PAC-122

### Associate in Arts Degrees -

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

### **Certificates of Proficiency -**

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

- · Digital Animation, Compositing, and Music
- Basic Music Skills

### **PROGRAMS OF STUDY**

## Digital Animation, Compositing, and Music

This program is directed at the digital design and implementation of 3D animations, graphic compositing and music.

### **CERTIFICATE OF PROFICIENCY**

Program Req	Units	
(Select five courses)		
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3
GCMW 204	Motion Graphics for Multimedia	4
GCMW 206	Motion Graphics Production and Compositing	4
MUS 180	Computer Music I	3
MUS 184	Electronic Ensemble	3
TOTAL UNITS		16 - 17

Digital Animation, Compositing, and Music Certificate of Proficiency is also listed in Art and in Graphic Communications - Multimedia and Web.

## Music

Students pursuing a music major will take the following required courses. Transfer students should consult the four-year college or university catalog for specific requirements or see a Palomar College counselor.

Note: MUS 103 is recommended for students who need preparation for Music Theory I.

### A.A. DEGREE MAJOR

Program Requirements		Units		
MUS 90	Fundamental Preparation for Music Majors	2		
MUS 100	Music Appreciation	3		
MUS 105	Music Theory I	3		
MUS 106	Music Theory II	3		
MUS 110	Music Skills I	1		
MUS III	Music Skills II	1		
MUS 180	Computer Music I	3		
MUS 210	Advanced Harmony	3		
MUS 211	Counterpoint	3		
MUS 215	Music Skills III	I		
MUS 216	Music Skills IV	I		
Group One (Select 12 units)				
MUS 134	Palomar Women's Chorus	I		
DNCE 137/				
MUS 137	Cuban and Brazilian Drumming I	.5 - 1.5		
DNCE   38/				
MUS 138	Cuban and Brazilian Drumming II	.5 - 1.5		
MUS 143	Palomar Chorale Chamber Ensemble	.5 - 1		
MUS 147	Concert Choir	1		
MUS 148	Palomar Chorale	I		
MUS 149	Spectrum Pop/Jazz Singers	I		