

**Los Medanos College**  
**LIBERAL ARTS: MATH AND SCIENCE**  
**Narrative November 2023**

**1. Statement of Program Goals and Objectives**

The Liberal Arts: Math and Science associate degree provides lower division preparation for many related baccalaureate majors. All courses in the program are specifically designed for transfer. Almost all of the Liberal Arts courses also meet IGETC and/or CSU-GE breadth requirements, which allows for students to earn the associate degree while meeting transfer requirements to California public universities, the destination of most LMC transfer students. Typically, private universities also accept these “packages” when admitting transfer students. The major also provides for a smooth transition to CSU’s popular pre-teaching Liberal Studies major, which requires broad preparation in the Liberal Arts.

**2. Catalog Description**

“The Liberal Arts major provides a rich educational experience through coursework in a broad range of academic disciplines. Liberal Arts provides excellent preparation for university transfer and/or a wide range of careers.

Students graduating with a Liberal Arts major are able to: read critically and communicate effectively as a writer and a speaker; understand the connections among academic disciplines and apply interdisciplinary approaches to problem solving; think creatively and critically; consider the ethical implications of knowledge; and possess a worldview informed by diverse social, multicultural and global perspectives.

Therefore, the broad based interdisciplinary nature of Liberal Arts provides a knowledge base and the communication and critical thinking skills necessary for many careers and occupations. The Liberal Arts major provides solid preparation for upper division work following transfer – more specifically, for university programs in teaching and pre-law and for careers such as business, government and communication. With proper course selection (see a counselor), LMC’s Liberal Arts major articulates with CSU’s popular upper division Liberal Studies major, which is the path to a teaching credential program. The Liberal Arts major incorporates many General Education requirements, so students typically need only to pass a few additional courses in order to complete the major.”

**3. Program Student Learning Outcomes**

- a. Read critically and communicate effectively as a write and speaker.
- b. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
- c. Think critically and creatively
- d. Consider the ethical implications inherent in knowledge, decision-making and action
- e. Possess a worldview informed by diverse social, multicultural and global perspectives.

**4. Program Requirements**

The college Curriculum Committee has determined that this 18-unit area of emphasis within the Liberal Arts prepares students for related majors at baccalaureate institutions. The degree is similar to the course patterns in the first two years at baccalaureate institutions for students pursuing Liberal Arts majors. Students who intend to transfer are advised to complete the CSU-GEbreadth or IGETC pattern, which also meets LMC's general education graduation requirements for the associate degree.

*Program requirements - Select 18-20 units from:*

**Current Courses:**

<b>Course Subject</b>	<b>Course Number</b>	<b>Course Title</b>
ANTHR	001	Biological Anthropology
ASTRO	010	Introduction to Astronomy
ASTRO	011	Astronomy Laboratory
BIOSC	005	Biology of Health
BIOSC	007	Ecology and the Environment
BIOSC	008	Human Biology
BIOSC	010	General Biology
BIOSC	020	Principles of Biology: Cell and Molecular
BIOSC	021	Principles of Biology: Organismal
BIOSC	030	Introduction to Anatomy and Physiology
BIOSC	040	Human Anatomy
BIOSC	045	Human Physiology
BIOSC	050	Microbiology
CHEM	006	Introduction to Inorganic and Physical Chemistry
CHEM	007	Introduction to General, Organic and Biochemistry
CHEM	025	General College Chemistry I
CHEM	026	General College Chemistry II
CHEM	028	Organic Chemistry
CHEM	029	Organic Chemistry
COMSC	040	Introduction to Computer and Information Systems
ENGIN	010	Introduction to Engineering
MATH	110	Introduction to Statistics
MATH	155	Precalculus
MATH	210	Calculus and Analytic Geometry I
MATH	220	Calculus and Analytic Geometry II
MATH	230	Calculus and Analytic Geometry III
MATH	240	Differential Equations
MATH	250	Linear Algebra

NUTRI	055	Introduction to Nutrition
PHYS	015	Introduction to Physics
PHYS	035	College Physics I
PHYS	036	College Physics II
PHYS	040	Physics for Scientists and Engineers I
PHYS	041	Physics for Scientists and Engineers II
PHYS	042	Physics for Scientists and Engineers III
PHYS	005	General Physical Science

LMC General Education CSU GE and IGETC Requirements, are provided as PDF documents.

Summary Table:

<b>Major Total</b> (AA Liberal Arts Math and Science):	18 units
<b>GE Pattern:</b>	
Local:	18-19 units
CSU GE:	39-44 units
IGETC:	37-42 units
<b>Electives:</b>	3-24 units
<b>Double counted:</b>	Up to 18 units
<b>Total Units for AA Degree:</b>	60 units

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