

Course Outline

COURSE: MATH 201A **DIVISION:** 10 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2013 **Inactive Course**

SHORT TITLE: MATH FOR SCI & ENGR

LONG TITLE: Math for Science and Engineering

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
1	18	Lecture:	1	18
		Lab:	0	0
		Other:	0	0
		Total:	1	18

COURSE DESCRIPTION:

This course will provide a combination of math study skills, introduction to scientific equipment and technology for mathematics, analysis of data from various branches of science, one or more field trips, investigation of educational plans and program choices at the transfer level. **COREQUISITE:** Enrollment in appropriate section of Math 205 which is part of a learning community.

PREREQUISITES:

COREQUISITES:
MATH 205

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES
P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:
02 - Lecture and/or discussion

STUDENT LEARNING OUTCOMES:

1. Student will identify the various branches of science.
ILO: 6, 7
Measure: oral report
2. Student will integrate personal learning strategies in their

Math 205 class.

ILO: 6, 2

Measure: written report

3. Student will utilize mathematical techniques and tools commonly used in science.

ILO: 2

Measure: demonstration

4. Student will develop an educational plan and investigate transfer options.

ILO: 3, 4, 6

Measure: oral report

5. Students will utilize scientific methodology in their exploration of various scientific fields.

ILO: 2, 7

Measure: demonstration

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Inactive Course: 02/25/2013

1 HOURS

Content: Course introduction/overview

SPO: Students will engage in group activity geared toward building community in the classroom.

HW: Student information sheet and/or autobiographical sketch of personal math study history.

6 HOURS

Content: Math study skills, learning style assessment, time management and test taking strategies.

SPO: Student will acquire self knowledge related to their learning style, learning strengths and weaknesses, and develop strategies and techniques to improve scholastic performance.

HW: Complete sources of help lab, learning style assessment, time management assignment, reading on test taking strategies, follow-up activities after exams.

3 HOURS

Content: Scientific applications of Mathematics

SPO: Student will be proficient in unit conversions, scientific notation, using technology such as spreadsheets and other software.

HW: Various assignments and/or group projects.

3 HOURS

Content: Campus support for ed plan and transfer, planning for successful completion of a four year degree.

SPO: Students will investigate opportunities available through campus support services and participate in a panel discussion of former Gavilan alumni active in the scientific field.

HW: Develop ed. plan, meet with various advisors, determine eligibility for services.

4 HOURS

Content: Scientific investigation and introduction to the various

scientific fields.

SPO: Students will examine and practice scientific methodology, including hypothesis formulation, data analysis, reporting on findings.

HW: Projects from a variety of scientific fields such as biology, chemistry, ecology, physical science and math.

1 HOURS

Final report relating the use of mathematics to a field/fields of science.

METHODS OF INSTRUCTION:

Lecture, group discussion, presentations, field trips.

METHODS OF EVALUATION:

The types of writing assignments required:

Written homework

Reading reports

Term papers

The problem-solving assignments required:

Homework problems

Lab reports

The types of skill demonstrations required:

None

The types of objective examinations used in the course:

None

Other category:

Individual and group presentations.

The basis for assigning students grades in the course:

Writing assignments: 25% - 35%

Problem-solving demonstrations: 25% - 35%

Skill demonstrations: 0% - 0%

Objective examinations: 0% - 0%

Other methods of evaluation: 30% - 40%

REPRESENTATIVE TEXTBOOKS:

Reading materials will be provided by instructor.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: A
Noncredit Category: Y
Cooperative Education:
Program Status: 2 Stand-alone
Special Class Status: N
CAN:
CAN Sequence:
CSU Crosswalk Course Department:
CSU Crosswalk Course Number:
Prior to College Level: Y
Non Credit Enhanced Funding: N
Funding Agency Code: Y
In-Service: N
Occupational Course: E
Maximum Hours:
Minimum Hours:
Course Control Number: CCC000435858
Sports/Physical Education Course: N
Taxonomy of Program: 170200