

Course Outline

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

TERM EFFECTIVE: Fall 2013 **Inactive Course**

SHORT TITLE: MATH 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, collection and analysis of data from various branches of science, one or more field trips, investigation of science careers and program choices at the transfer level. **COREQUISITE:** Enrollment in appropriate section of Math 233 which is part of a learning community.

PREREQUISITES:

COREQUISITES:

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 and possible career choices.

ILO: 6, 7

Measure: oral report

2. Student will identify personal learning strategies and integrate

them in their Math 233 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 investigate and engage in campus support services.

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

**Students who have previously taken Math 201A will complete activities in Math 201B that require more complex thinking. For shared activities, such as field trips and guest speakers, repeating students will be asked to compare and contrast their personal experiences with these activities.

Content: Course introduction/overview

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

HW: Complete student information sheet and/or personal journal writing related to past math experiences.

3 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 activity, learning style assessment, time management assignment, readings on math study skills and test taking strategies.

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 MESA, TRIO, financial aid, Rho Alpha Mu and other support agencies on campus, 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

8 HOURS

Content: Scientific investigation and introduction to the various

scientific fields. Use of mathematics to analyze scientific information.

SPO: Students will examine and practice scientific methodology, including hypothesis formulation, data collection and analysis, reporting on findings. Students will utilize mathematical techniques and technology to perform scientific analysis.

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

2 HOURS

Content: Exploration of careers in math, science, and engineering.

SPO: Students will explore the various career opportunities available in science, engineering and math, and investigate professional organizations for scientists and engineers.

HW: Presentation and group discussion on investigations.

1 HOURS

Final presentations

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: CCC000435859
Sports/Physical Education Course: N
Taxonomy of Program: 170200