COLLEGE OF SAN MATEO

COURSE OUTLINE

COURSE TITLE Oceanography Laboratory/Field Study DEPT./NUMBER OCEN 101

UNITS OF CREDIT 1 LEC. HOURS/WEEK _____ COURSE LENGTH Semester

DEGREE APPLICABLE X LAB. HOURS/WEEK 3

NON-DEGREE APPLICABLE _____ OTHER HOURS/WEEK _____

1. CATALOG DESCRIPTION
   Three lab hours per week. Prerequisite: Completion of or concurrent enrollment in OCEN 100. Introduction exercises in ocean currents, sedimentation, marine life forms, materials of the oceanic crust and sea floor, physical and chemical properties of sea water, and plate tectonics. Field trips included.

2. CLASS SCHEDULE DESCRIPTION
   Lab exercises in ocean currents, sedimentation, marine life forms, and physical and chemical properties of sea water. Prereq: See #1 above.

3. PREREQUISITES AND COMPETENCY LEVELS REQUIRED
   See #1 above.

4. COURSE OBJECTIVES
   Study and laboratory materials and work exercises are presented to demonstrate and give practice in the methodology and techniques which support and clarify principles, theories and larger ideas. Such laboratory experiences force students through the inductive steps by which one reaches larger conclusions.

5. RECOMMENDED TEXT MATERIALS
   Pipkin et al, Laboratory Manual: Lab Exercises in Oceanography, 2nd edition, W. H. Freeman & Co.

6. SUPPLIES NEEDED
   Felt pens, ruler

7. SCOPE OF THE COURSE
   A. Geography of the major water bodies.
   B. Geography of the sea floor.
   C. Circulation patterns within the seas.
   D. Patterns of oceanic sedimentation.
   E. Sediment types.
   F. Life in the sea.
      1) Microscopic
      2) Megascopic
   G. Geology of the coastal margins.
   H. Geology of the sea floor.
   I. Physical and chemical properties of sea water.
   J. Processes at the margins of tectonic plates.
      1) Mid-ocean ridges.
      2) Deep-sea trenches.
      3) Great shear zones (trans forms).

8. EVALUATION
Based on written reports, exercises, oral responses, and written exams.

PREPARED BY: Glen

William Glen

5/88