



University Bulletin

Undergraduate Degree Programs

Marine Sciences Minor

PROFESSOR LEE R. KUMP, *Chair, Marine Sciences Committee (MARSC)*

This program provides an excellent opportunity for undergraduates to pursue their interests in the study of the oceans and make more informed decisions about future graduate studies in marine sciences. Although Penn State does not award degrees in this field, a number of faculty pursue research interests in the marine sciences, and a varied selection of undergraduate courses in the marine sciences is available. The student can either complete the requirements for the minor at University Park (UP) or participate in an intensive semester-long oceanography experience at the Southampton, UK, Oceanography Centre (SOC) through Education Abroad:

The latter option may be of particular interest to students from non-UP locations. SOC has designed a program for PSU students that provides abundant opportunity to participate in shipboard oceanographic research, including a week of day-cruises in the spring and a 2-week series of cruises in June. Students who elect to pursue that minor at UP have the opportunity to receive training as scientific scuba divers through Penn State's Science Diving Program and participate in a number of other field experiences in the marine sciences.

MARINE SCIENCES MINOR: The Marine Sciences Committee is authorized to award a minor certificate to any undergraduate student regularly enrolled in a degree program at the University who, in addition to satisfying the degree requirements of his or her baccalaureate major, satisfies the requirements for the Marine Sciences minor. The completion of the minor is reflected by a formal notation on the student's official record at the time of graduation.

To enter the program, a student must have attained at least fourth-semester standing, completed CHEM 112, MATH 111 or MATH 141, and BIOL 110 or their equivalents, and have earned a cumulative grade-point average of at least 2.50. To ensure adequate advising and record keeping, the student must apply for the minor in the Marine Sciences program office and must then complete the requirements shown below.

Courses offered by other institutions may be substituted for any of the required courses listed below, if accepted for transfer by the student's major department and approved by the Marine Sciences Committee. This includes up to 16 transfer credits from SOC. Upon completion of the requirements and no later than the tenth week of the semester in which the student is to graduate, he or she must verify in the Marine Sciences program office that the requirements have been met.

In addition to the entrance requirements shown above, there are prerequisite credits required for courses listed under Supporting Courses and Related Areas.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 19 credits

PRESCRIBED COURSES (3 credits)

GEOSC 040 GN(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (16 credits)

At least 6 credits of field studies from the following list: EARTH 240(3), EM SC 440(3), BIOL 499A IL(3), BIOL 450W(3-5) or BIOL 496(1-6), ERM 496(1-6), GEOSC 496(1-6), METEO 496(1-6) with consent of instructor and Marine Science Minor (Sem: 5-8)

Students may also wish to transfer 6 credits of field-oriented course work from another institution with prior approval of the chair of the Marine Sciences minor.

Select 10 credits from the following list: BIOL 417(4), GEOSC 410(3), GEOSC 419(3), GEOSC 440(3), METEO 022(2), METEO 451(3), W F S 435/E R M 435(3) (Sem: 5-8)

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This is the official bulletin of The Pennsylvania State University. Programmatic expectations for General Education are those in effect at the time of admission to degree candidacy, and college and major requirements are those in effect at the time of entry to college and major. These are accurately indicated in each student's degree audit.

The University reserves the right to change the requirements and regulations listed here and to determine whether a student has satisfactorily met its requirements for admission or graduation, and to reject any applicant for any reason the University determines to be material to the applicant's qualifications to pursue higher education. Nothing in this material should be considered a guarantee that completion of a program and graduation from the University will result in employment.

The University Faculty Senate has responsibility for and authority over all academic information contained in the Undergraduate Bulletin.