

PRE-OCEANOGRAPHY

The study of oceanography is as deep and wide as the ocean itself. Oceanographers study the biology, geology, chemistry, and physics of the oceans. You can start your path to an Oceanography degree, Marine Biology degree, or other similar subject right here at Wayne State College in our pre-oceanography program. After spending two years here working on foundational courses, you can transfer to another school offering an Oceanography or Marine Biology program, ultimately earning your bachelor's degree from them. Or, you can work on a degree in Biology, Chemistry, and/or Mathematics here at WSC and then pursue Oceanography in graduate school.

fast facts

Transfer details: You'll begin your education at WSC and finish your bachelor's degree at a school with an Oceanography program.

Department: Physical Sciences and Mathematics

School: Science, Health, and Criminal Justice

Suggested programs of study: Biology, Chemical Sciences, Mathematics

Popular minors: Earth Science, Geography, Biology, Physics, Computer Science, Chemistry, Mathematics

focus on results

Skills Learned

- Biological systems and structures
- Experimental design and process
- Modern lab techniques
- Introductory geology
- Introductory meteorology
- Fundamental physics
- Chemical basics
- Research, data collection, and analysis
- Critical thinking and problem-solving
- Communication

Possible Careers

- Oceanographer
- Data analyst
- Research assistant
- Marine biologist
- Marine geologist
- Marine chemist
- Marine physicist
- Coastal engineer
- Scientific diving technician
- Climatologist
- Marine policy specialist
- Environmental scientist

Types of Employers

- Marine research facilities
- Environmental organizations
- Marine sanctuaries
- Fisheries
- Ocean instrument manufacturers
- Offshore companies
- Oceanographic institutions
- Aquatic companies
- Schools and universities
- Government agencies
- Non-profit organizations
- Environmental consulting companies

outside the classroom

Activities / Opportunities

- Peer mentoring and tutoring
- Service-Learning
- Study Abroad

Clubs / Organizations

- Biology Club
- Kappa Mu Epsilon (Math Honorary)



Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

Every effort is made to ensure this information is current, but please be aware that some content may have changed. There is no substitute for developing a careful course registration plan in consultation with your advisor. The class sequence listed is suggested only. The final decision rests with the student and academic advisor.

Students must complete the listed coursework below in addition to meeting the general education requirements.

Freshman - 1st semester

BIO 110 Biology Concepts or *EAS 110 Introduction to Meteorology.....	4
CHE 106 General Chemistry I.....	4
MAT 130 Pre-Calculus or MAT 140 Calculus I.....	5
General Studies.....	3

Freshman - 2nd semester

BIO 200 Zoology or **EAS Introduction to Geology.....	4
CHE 107 General Chemistry II.....	4
MAT 140 Calculus I or MAT 240 Calculus II.....	5
General Studies.....	3

Sophomore - 1st semester

MAT 180 Applied Probability and Statistics or MAT 240 Calculus II.....	3-5
*PHY 301 University Physics I.....	4
*PHY 321 Physics I Lab.....	1
General Studies and/or electives in consultation with advisor.....	6

Sophomore - 2nd semester

**PHY 302 University Physics II.....	4
**PHY 322 Physics II Lab.....	1
General Studies and/or electives in consultation with advisor.....	6

Junior

For students electing to stay the third year at WSC, they are advised to specialize in one of the following areas: Chemistry, Physics, Biology, Earth Sciences, or Mathematics. (A minimum of 8 hours of science per term and a continuation of mathematics.)


Senior

For students completing four years at WSC, advisement is for a major in Chemistry, Biology, Mathematics, or Computer Science in preparation for a graduate degree in Oceanography.

*Offered fall semester
**Offered spring semester

pre-oceanography

faculty



Visit www.wsc.edu/psm to learn more about the Department Physical Sciences and Mathematics.

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