

# DEPARTMENT OF OCEANOGRAPHY

<http://ocean.tamu.edu/>

**Head:** S. Yvon-Lewis

**Graduate Director:** C. Wiederwohl

## Degrees

Degrees of Master of Science and Doctor of Philosophy are offered in oceanography. The department also offers the Master of Ocean Science and Technology (MOST) non-thesis professional degree.

The Department of Oceanography has combined 5-year Bachelor's/MOST Programs in conjunction with Environmental Geosciences, Atmospheric Sciences, Geology, and Oceanography. These combined programs offer motivated and exceptional students the opportunity to achieve aspirations in an efficient program at Texas A&M, completing a Bachelor's degree in one of these majors: Environmental Geosciences (BS), Meteorology (BS), Geology (BS), Oceanography (BS) and the Master of Ocean Science and Technology degree in 5 years. There are six credit hours used for dual credit in this program. There is a total of 150 hours of coursework. The concurrent degree program enables these motivated students to coordinate the required BS coursework (114 undergraduate credit hours plus 6 dual credit graduate courses) and MOST coursework (36 credit hours including the 6 dual credit graduate courses) to complete the required credit hours for each degree without diminishing scope or quality of work within 5 years.

## Oceanography

Oceanography is the interdisciplinary science that focuses on the ocean, its contents and its boundaries. Whereas typical graduate programs lead to progressively greater amounts of specialization, oceanography as an interdisciplinary field admits graduates of specialized areas such as biology, chemistry, geology, geophysics, mathematics, physics or engineering and initially generalizes and broadens their education with a core of required courses. These core courses include the four specializations of the oceanography program—biological, chemical, geological and physical oceanography—as well as a seminar covering the state of the science. After this exposure to the interdisciplinary nature of oceanography, the graduate student refocuses in their particular subject area to pursue research at the leading edge of the science.

Required prerequisites are the equivalent of a BS degree and basic courses in the fields mentioned above. All students are expected to have had mathematics through integral calculus, at least one year of calculus-based physics, and one year of chemistry. These are in addition to the usual amount of coursework in their major field of science or engineering.

To qualify for an advanced degree in oceanography, the student must demonstrate an ability to apply basic science to the marine environment. This capability requires a combination of principles and methods and a certain body of knowledge unique to oceanography; a student of oceanography must become conversant in all of the marine sciences.

## Facilities and Participation in Research

Facilities include office, laboratory and classroom space in the 15-story David G. Eller Building for Oceanography and Meteorology on the College Station campus; the Geochemical and Environmental Research Group,

which occupies 20,000 square feet of laboratory and office space and a warehouse-shop area of 8,000 square feet. Graduate students pursuing MS or PhD degrees usually take an active part in research grants and contracts awarded to individual professors or research teams by federal and state agencies, industry and private foundations.

## Faculty

Baldauf, Jack G, Professor  
Oceanography  
PHD, University of California at Berkeley, 1985

Campbell, Lisa, Research Professor  
Oceanography  
PHD, State University of New York at Stony Brook, 1985

Chang, Ping, Professor  
Oceanography  
PHD, Princeton University, 1988

Dimarco, Steven F, Professor  
Oceanography  
PHD, The University of Texas at Dallas, 1991

Fitzsimmons, Jessica N, Associate Professor  
Oceanography  
PHD, Massachusetts Institute of Technology, 2013

Gold Bouchot, Gerardo, Professor  
Oceanography  
PHD, CINVESTAV Merida, 1991

Henrichs, Darren, Instructional Assistant Professor  
Oceanography  
PHD, Texas A&M University, 2012

Hu, Sarah, Assistant Professor  
Oceanography  
PHD, University of Southern California, 2018

Jones, Cory, Assistant Professor  
Oceanography  
PHD, University of California, San Diego, 2018

Knap, Anthony H, Professor  
Oceanography  
PHD, University of South Hampton, 1978

Liu, Yina, Assistant Professor  
Oceanography  
PHD, Texas A&M University, 2013

Orsi, Alejandro H, Professor  
Oceanography  
PHD, Texas A&M University, 1993

Potter, Henry, Associate Professor  
Oceanography  
PHD, University of Miami, 2014

Shamberger, Kathryn E, Associate Professor  
Oceanography  
PHD, University of Washington, 2011

Slowey, Niall C, Professor  
Oceanography  
PHD, Massachusetts Institute of Technology, 1991

Sylvan, Jason B, Associate Professor  
Oceanography  
PHD, Rutgers University, 2008

Thomas, Deborah J, Professor  
Oceanography  
PHD, University of North Carolina at Chapel Hill, 2002

Thornton, Daniel C, Professor  
Oceanography  
PHD, Queen Mary Westfield College, University of London, 1996

Wiederwohl, Christina L, Instructional Associate Professor  
Oceanography  
PHD, Texas A&M University, 2012

Yvon-Lewis, Shari A, Professor  
Oceanography  
PHD, University of Miami, 1994

Zhang, Shuang, Assistant Professor  
Oceanography  
PHD, Yale University, 2017

Zhang, Yige, Associate Professor  
Oceanography  
PHD, Yale University, 2015

## Masters

- Master of Ocean Science and Technology in Ocean Science and Technology (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/arts-and-sciences/oceanography/most/>)
- Master of Science in Oceanography (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/arts-and-sciences/oceanography/ms/>)

## Doctoral

- Doctor of Philosophy in Oceanography (<http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/arts-and-sciences/oceanography/phd/>)