Department of Atmospheric Sciences

http://atmo.tamu.edu

Head: R. Saravanan
Graduate Chair: I. Szunyogh

Thesis and non-thesis Master of Science as well as Doctor of Philosophy degrees are offered in atmospheric sciences. Students from disciplines other than meteorology are encouraged to enroll in our graduate program. Normal prerequisites are 12 hours of calculus and differential equations and 8 hours of physics. The department offers a basic sequence of courses each year that covers key topics of atmospheric relevance in the areas of fluid dynamics, thermodynamics, cloud physics, radiation, and chemistry. These courses form a base for a large number of the other graduate courses. By the end of their first year, students typically have made arrangements to begin a research project directed by a faculty member. Faculty interests span a wide range extending from field and laboratory work through data analysis, numerical modeling, and theory. Please see the department’s website at http://atmo.tamu.edu for more information. The Department of Atmospheric Sciences can also serve as the “home” department for the Master of Geoscience Degree. The MGsc is a non-thesis degree that provides a multidisciplinary background in the geosciences that is appropriate for science teachers in public schools or for individuals interested in environmental issues.

Persons with an MS degree in atmospheric sciences typically obtain employment with government agencies, industrial organizations, and consulting firms, or they may enter the meteorological branch of one of the military services. The PhD degree is normally required for a college level teaching or research career.

The Department of Atmospheric Sciences occupies the upper floors in the 15-story David G. Eller Building for Oceanography and Meteorology. The 10-cm Doppler weather radar on top of the building is a campus landmark, and the department jointly operates two mobile radars. In-house laboratory facilities and fixed and mobile observing suites offer many opportunities for physical and chemical studies of the atmosphere. The department is well-equipped for data analysis and modeling, with a high-speed network, numerous personal computers, teaching laboratories, and high-performance computing systems. Additional computing resources are available at the University’s Supercomputing Facility.

The Cooperative Institute for Applied Meteorological Studies (CIAMS) is affiliated with the Fort Worth-based headquarters office of the Southern Region of the National Weather Service. The Institute employs research scientists and graduate students in a broad program of applied research and service to Texas and surrounding states in agricultural meteorology, marine meteorology and air-sea interactions over the Gulf of Mexico, lightning and severe weather, and Doppler radar studies from the installments in the Department and at the Houston Forecast Office.

Faculty

Bowman, Kenneth P, Professor
Atmospheric Sciences
PHD, Princeton University, 1984

Brooks, Sarah D, Professor
Atmospheric Sciences
PHD, University of Colorado, 2002

Conlee, Don T, Instructional Professor
Atmospheric Sciences
PHD, Texas A&M University, 1994

Dessler, Andrew E, Professor
Atmospheric Sciences
PHD, Harvard University, 1994

Epifanio, Craig C, Associate Professor
Atmospheric Sciences
PHD, University of Washington, 1999

Korty, Robert L, Associate Professor
Atmospheric Sciences
PHD, Massachusetts Institute of Technology, 2005

Liu, Xiaohong, Professor
Atmospheric Sciences
PHD, Nanjing University, China, 1992

Logan, Timothy S, Assistant Professor
Atmospheric Sciences
PHD, University of North Dakota, 2014

Nielsen-Gammon, John W, Regents Professor
Atmospheric Sciences
PHD, Massachusetts Institute of Technology, 1990

Nowotarski, Christopher J, Associate Professor
Atmospheric Sciences
PHD, Pennsylvania State University, 2013

Panetta, Richard L, Professor
Atmospheric Sciences
PHD, University of Wisconsin, 1978

Rapp, Anita D, Assistant Professor
Atmospheric Sciences
PHD, Colorado State University, 2004

Saravanan, Ramalingam, Professor
Atmospheric Sciences
PHD, Princeton University, 1990

Schade, Gunnar W, Associate Professor
Atmospheric Sciences
PHD, Johannes Gutenberg Universitat at Germany, 1997

Schumacher, Courtney, Professor
Atmospheric Sciences
PHD, University of Washington, 2003

Szunyogh, Istvan, Professor
Atmospheric Sciences
PHD, Hungarian Academy of Sciences, 1994

Xu, Yangyang, Assistant Professor
Atmospheric Sciences
PHD, University of California at San Diego, 2014
Yang, Ping, University Distinguished Professor
Atmospheric Sciences
PHD, University of Utah, 1995

Zhang, Renyi, University Distinguished Professor
Atmospheric Sciences
PHD, Massachusetts Institute of Technology, 1994

**Masters**

- Master of Science in Atmospheric Sciences (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/arts-and-sciences/atmospheric-sciences/ms/)

**Doctoral**

- Doctor of Philosophy in Atmospheric Sciences (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/arts-and-sciences/atmospheric-sciences/phd/)