2009-2010 Course Catalog

The University Of Montana

Division of Biological Sciences

Charles H. Janson, Associate Dean for the Biological Sciences

The Division of Biological Sciences offers undergraduate and graduate programs representing the full range of the biological sciences. The Division offers bachelor degrees in biology (with a broad array of formal options including botanical sciences, cellular and molecular biology, ecology, field ecology, human biological sciences, natural history, zoological sciences, biological education and general sciences education), medical technology, microbiology including microbial ecology, and wildlife biology (a cooperative program administered by the College of Forestry and Conservation). The Division also advises students in pre-medical and other pre-health sciences, and offers a series of courses during the summer at the University's Flathead Lake Biological Station (see separate listing in this section). The Division is one of the leading research units in the University. Research programs in the Division provide abundant opportunities for students to enhance their educational experience by participating in research. Several sources of funding are available to support undergraduate student research, and the Division participates in the University undergraduate research symposium each spring.

Graduate degrees offered by the Division of Biological Sciences include Master of Science degrees in biochemistry, microbiology, and organismal biology and ecology. Doctor of Philosophy degrees in integrative biochemistry and microbiology, organismal biology and ecology, and biomolecular structure and dynamics are offered. The Division participates in the graduate (M.S. and Ph.D.) program in wildlife biology, administered by the College of Forestry and Conservation. Information on graduate study and program requirements is available from the Graduate School or the Division of Biological Sciences.

The Division of Biological Sciences is committed to providing coursework and experiences for non-science majors. The world faces many problems and opportunities that include significant biological components. Courses for non-science majors have the goal of fostering understanding of the process of science and enhancing biological knowledge as it relates to environmental, medical, social, and other issues. A number of introductory courses are open both to majors and non-majors. In addition, the Division offers courses designed specifically for non-majors: elementary medical microbiology, introductory ecology, Montana wildlife, and others.

Degree requirements and courses are described below (see the College of Forestry and Conservation for information about wildlife biology).

Faculty

Professors

Fred W. Allendorf, Ph.D., University of Washington, 1975

- Joel Berger, Ph.D., University of Colorado, Boulder, 1978 (John J. Craighead Endowed Chair)
- Carol A. Brewer, Ph.D., University of Wyoming, 1993
- Ragan M. Callaway, Ph.D. University of California at Santa Barbara, 1990
- Kenneth P. Dial, Ph.D., Northern Arizona University, 1984
- Douglas Emlen, Ph.D., Princeton University, 1994
- Kerry R. Foresman, Ph. D., University of Idaho, 1977
- James E. Gannon, Ph.D., University of Houston, 1981
- Willard O. Granath, Ph.D., Wake Forest University, 1982
- Erick P. Greene, Ph.D., Princeton University, 1989
- F. Richard Hauer, Ph.D., North Texas State University, 1980
- Walter E. Hill, Ph.D., University of Wisconsin, 1967
- William E. Holben, Ph.D., University of New York, Buffalo, 1985
- Richard L. Hutto, Ph.D., University of California at Los Angeles, 1977
- Charles H. Janson, Ph.D., University of Washington, 1985
- Ralph C. Judd, Ph.D., The University of Montana, 1979
- Michael F. Minnick, Ph.D., Washington State University, 1987
- Jack H. Nunberg, Ph.D., Stanford University, 1979 (Director for the Montana Biotechnology Center)
- Anna Sala, Ph.D., University of Barcelona, 1992
- D. Scott Samuels, Ph.D., University of Arizona, 1991
- Stephen Sprang, Ph.D., University of Wisconsin, Madison, 1977 (Director, Center for Biomolecular Structure and Dynamics)
- Jack A. Stanford, Ph.D., University of Utah, 1975 (Bierman Professor; Director of the Biological Station)

Associate Professors

- Mark L. Grimes, Ph.D., University of Oregon, 1986
- Jesse C. Hay, Ph.D., University of Wisconsin, Madison, 1994
- J. Stephen Lodmell, Ph.D., Brown University, 1996
- John L. Maron, Ph.D., University of California-Davis, 1996
- Michele A. McGuirl, Ph.D., Montana State University, 1999
- Scott Miller, Ph.D., University of Oregon, 1999
- Frank Rosenzweig, Ph.D., University of Pennsylvania, 1991
- Bret W. Tobalske, Ph.D., The University of Montana, 1994 (Director of the Field Station at Fort Missoula)

Assistant Professors

- Creagh W. Breuner, Ph.D., University of Washington, 1998.
- Sarah J. Certel, Ph.D., The University of Iowa, 1999
- Vanessa O. Ezenwa, Ph.D., Princeton University, 2002
- Lila Fishman, Ph.D., Princeton University, 1998
- Jeffrey Good, Ph.D., University of Arizona, 2007
- Winsor H. Lowe, Ph.D., Dartmouth College, 2002
- John P. McCutcheon, Ph.D., Washington University, 2006
- Brent J. Ryckman, Ph.D., The University of Iowa, 2003
- Scott A. Wetzel, Ph.D., Oregon Health and Science University, 2001
- H. Arthur Woods, Ph.D., University of Washington, 1998

Lecturers

- Heather Davis, M.S., The University of Montana, 2005
- Kevin J. Murray, Ph.D., University of Nevada-Reno, 1994

Research Faculty

- Jim Battisti, Ph.D., The University of Montana, 1998
- Jerry J. Bromenshenk, Ph.D., Montana State University, 1973
- Dan Drecktrah, Ph.D., Cornell University, 1999
- Bonnie Ellis, Ph.D., The University of Montana, 2006
- Ric Hauer, Ph.D., University of North Texas, 1980
- John Kimball, Ph.D., Oregon State University, 1995
- Evgueny Kroll, Ph.D., Hopkins School of Medicine, USA
- Penny Kukuk, Ph.D., University of Kansas, 1980
- Jean-Marc Lanchy, Ph.D., University; Louis Pasteur, Stransbourg, France
- Gordon Luikart, Ph.D., The University of Montana, 1997
- Megan McPhee, Ph.D., University of New Mexico, 2003
- Dan Mummey, Ph.D., University of Wyoming, 2003
- Philip Ramsey, Ph.D., The University of Montana, 2006

Associated Faculty

- Thomas E. Martin, Ph.D., University of Illinois, 1982
- L. Scott Mills, Ph.D., University of California, Santa, Cruz, 1993