

New Course
Winter 2010



EARTH 360

INSTRUMENTATION & FIELD METHODS

Department of Earth and Planetary Sciences
Dr. Patricia Beddows, and Dr. Suzan van der Lee
Lectures Tuesday & Thursday 11:00 – 12:30
Labs 2.5 hours, to be scheduled in first week of class

Description: Theory and practicum on electronic instrumentation for monitoring and measurement mass and energy flux and material characterization in earth sciences, including data loggers, hands-on design and construction of sensors, signal processing, data management, and network design.

Pre-requisites: Completion of three 300 level Earth and Planetary Science courses, or registration in the EPS graduate program, **or consent of the instructor**. This course is appropriate for any physical and life science students including earth sciences, biology, physics, anthropology, engineering, and who have an interest in using instrumentation or data from monitoring networks in their learning and research.

Learning Beyond the Classroom

March Trip to the Yucatan Peninsula, Mexico – (March break). Students will have the opportunity to use their knowledge and skills from the field based learning and instrument experience. See www.northwestern.edu/magazine/fall2009/studentlife/science.html for highlights of the 2009 trip.

Argonne National Laboratories – Argonne hosts the world's brightest photon source and during our special access tour we will see the exciting research carried out in some of the beam lines.