23 February 2015

Dear Atmospheric and Oceanic Sciences Undergraduate Student:

I am Professor Galen McKinley, the undergraduate chair for the Department of Atmospheric and Oceanic Sciences. I will be working with you this year as you make progress toward declaring and/or completing your major. On behalf of the entire faculty, I welcome you to an exciting year of study in the Atmospheric and Oceanic Sciences!

Please do come to see me so that we can get acquainted, address your questions and get forms signed:

- Drop-in advising: **Mondays from 2:30-3:20PM** (except 3/16)
- If this time doesn’t work for you, please contact Nicole Weissinger, the staff advisor for AOS to see if she can address your question (wiessinger@wisc.edu). If you need still to see me, please send an email and we will arrange a time.

If you want to discuss declaration or progress towards the major, **bring a hard copy of your DARS What-IF** (http://registrar.wisc.edu/dars_student.htm) when we meet.

For your reference, the next page offers a summary of critical information about the AOS major.

Sincerely,

Galen McKinley, Associate Professor
Undergraduate Chair for Atmospheric and Oceanic Sciences
aosadv@aos.wisc.edu
AOSS 1511
The AOS Undergraduate Program is described in full at:
http://www.aos.wisc.edu/education/undergrad_program.htm

Kathy Kruger is the Student Status Examiner (Room 849E AOSS, kakruger2@wisc.edu, 608-262-2827). She can help you with understanding requirements, scheduling, forms and form submission.

Declaring an AOS major, requires, with a grade point average ≥2.25, completion of:
*MATH 221: Calculus and Analytic Geometry. I, II, SS; 5 cr
*MATH 222: Calculus and Analytic Geometry. I, II, SS; 5 cr
*MATH 234: Calculus — Functions of Several Variables. I, II, SS; 3 cr
*CHEM 10X
*PHYS 207 (or 201): General Physics. I, II, SS; 5 cr (r-P-I)
PHYS 208 (or 202): General Physics. I, II, SS; 5 cr (P-I)

One computer science is also required, but is not included in the GPA ≥2.25 calculation. A course in scientific programming (Python, Matlab, Fortran, C++) such as COMP SCI 301 or 310 are recommended.

Courses with * should be completed before the junior year as they develop skills critical to the successful completion of the core sequence (310, 330, 311, 340).

The Declaration of Major form and other information is http://mckinley.aos.wisc.edu/advising/

Completing the major
This requires a grade point >2.0 in the following courses:

- Ten credits in the one-year core sequence ATM OCN 310, 330, 311, 340. The core sequence begins in the fall semester only and is typically taken in the Junior Year.
- At least twelve credits in ATM OCN courses numbered above 400, including the required one credit capstone seminar, ATM OCN 405. For the remaining credits, ATM OCN 425, 441, 452, and 453 are the courses most often selected. Typically these credits are taken in the Senior Year.
  - The twelve credits may also include independent study (ATM OCN 699) or a senior thesis (ATM OCN 681 & 682 or 691 & 692). No more than two of the twelve credits may be earned with internships.
- One course in mathematics, computer sciences or statistics with a prerequisite of MATH 234. Examples include:
  MATH 319: Techniques in Ordinary Differential Equations. I, II, SS; 3 cr
  MATH 321: Applied Mathematical Analysis. I, SS; 3 cr
  MATH 322: Applied Mathematical Analysis. I, SS; 3 cr (requires 321)
  MATH 340: Elementary Matrix and Linear Algebra. I, II, SS; 3 cr
  COMP SCI 412: Introduction to Numerical Methods. I, II, SS; 3 cr
  STAT 311: Introduction to Mathematical Statistics. I, SS; 4 cr

Regular events in our Department to enhance your AOS experience
Weekly Weather Watch Fridays 12:15 – 1:15 AOSS Room 811
Department Colloquium Monday 3:30 – 4:30 AOSS Room 811
Student AMS Chapter Monthly meetings (http://www.aos.wisc.edu/~ams/)

Professional Societies
American Geophysical Union http://www.agu.org/
American Meteorological Society http://www.ametsoc.org
Association for the Sciences of Limnology and Oceanography http://www.aslo.org/
The Oceanography Society http://www.tos.org/