Instructor: Professor Brian Colle, 135 Endeavour Hall, SoMAS
632-3174, brian.colle@stonybrook.edu

Office Hours: TBA or appointment

Class Hours: TBA
Attendance is mandatory: (1 unexcused absence allowed; 2% deduction in the total course average for each additional absence).

Text:
ATM205 textbooks are useful. There will be handouts.

Learning Objectives:

- Use actual weather data to better understand basic dynamical principles to develop a physical understanding of various weather phenomena.
- Explore the three-dimensional structure of the atmosphere.
- Learn basic forecast techniques.
- Improve ability to discuss logically with peers weather processes.
- Explore specific topics, such as the hypsometric equation, structure and evolution of extratropical cyclones, fronts, hurricanes, and convective systems, surface and upper air analysis techniques, radar and satellite interpretation, and introduction to operational products and forecasting.

Equipment: 3 #2 pencils and large eraser
colored pencils --red, blue, green and purple

Grading:
1/3 Labs and homework
1/3 2-3 Midterm exams
1/3 Final exam
Extra Credit: 1 % is added to homework/lab average for each Fri weather discussion or ATM/MAR seminar attended (10 % max). See instructor for other possibilities...
Final Exam: TBA

Course Outline:

2. Scalar Analysis. Geostrophic, gradient, and ageostrophic wind relationships. Station models and aviation reports. Lab: Station model and aviation report (Metar) interpretation, 500 and 850 mb analyses.


8. Tropical meteorology. Basic characteristics and comparison to midlatitudes. Easterly waves and tropical storms.


ACADEMIC INTEGRITY:
Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person’s work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the
academic judiciary website at http://www.stonybrook.edu/uaa/academicjudiciary