Instructor: Prof. Kristen Corbosiero, ES 321, 442-5852, kcorbosiero@albany.edu

Class hours: Monday and Wednesday 2:45–4:05 PM in ES 328

Office hours: Tuesday and Thursday 10–11 AM, and by appointment

Class web site: http://www.atmos.albany.edu/daes/atmclasses/atm741


Grading: Journal article discussion (20%); Project proposal (35%); Class project (45%)

Class format: The emphasis of this class will be on fundamental aspects of tropical cyclone (TC) structure and intensity change, with a focus on symmetric versus asymmetric processes. We will review seminal papers in the field and follow the progress of modern TC research to the unanswered questions of today from both an observational and numerical modeling perspective.

The course will include lectures, student led journal article discussions, and group projects. The lectures will focus on fundamental topics of TC dynamics, providing students with the background to understand and interpret the articles chosen and discussed in class. Lecture topics will be determined based on the instructor’s and students’ interests. The project proposals and group projects will build upon information from the lectures and article discussions, and allow students to gain experience in writing and reviewing research proposals, as well as collaborating on research projects.

Journal article discussions: Each student will choose a journal article relevant to the course and lead a 45-min discussion centered on the main theme(s) of the article. All students are expected to participate. To help encourage a lively discussion, the student leading the discussion is responsible for creating a one page summary sheet (more pictures, fewer words) about the article, to be sent to the professor by noon on the day of the discussion. Discussion dates will be determined on a “first come, first served” basis.

Project proposals and group projects: Each student will write a two-page research project proposal (NSF Graduate Research Fellowship proposal format) and present their ideas to the class. Students will review each proposal, provide feedback on the proposal and presentation, and rank each proposal. The top four proposals will be “funded”, i.e., they will become the topics for the group projects. The project papers will be due on Friday, 6 May, and project presentations will be scheduled during the final exam period (Friday, 13 May, 10:30 AM–12:30 PM) or another agreed upon time.