

MATH (MARS) 4730/6730: Mathematics and Climate

When: Tuesday & Thursday, 14:00–15:15.

Instructors: Malcolm Adams and Adrian Burd

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Office hours: TBD

Textbook: *Mathematics and Climate* by Hans Engler and Hans Kaper. In addition, there will assigned papers to read selected from the primary literature.

Topics: The topics covered in the course include: Climate history — Energy Balance Models — Dynamical Systems — Snowball Earth — Earth System Models — El Niño Models — Models of thermohaline circulation — Astronomical Forcing and Milankovitch Cycles.

Class project: A major portion of your grade will depend on an extensive class project, working in small groups. More details about this project will be discussed as the course develops.

Homework: Homework will be assigned in the class with due dates announced at the time of assignment.

Grades will be assigned according to the following scheme:

Homework: 35%

Project: 50%

Participation: 15%

Questions and participation during class are strongly encouraged.

Academic Honesty: All students are encouraged to become familiar with the University's policy on academic honesty, which is our basic standard of conduct.

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at:

<https://ovpi.uga.edu/academic-honesty/academic-honesty-policy>.

Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

Disabilities Accommodations: If you have a documented disability or learning disability and need accommodations please contact the Disability Resource Center

<http://www.drc.uga.edu/about/welcomeletter.php>

Disclaimer: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.