

2016 Summer Math Review (Noncredit)

11 July - 5 August

This course is a review of mathematical methods that are commonly used in oceanography and engineering. Mathematical methods and techniques commonly encountered by first-year students in the Joint Program will be covered. Each session focuses on a specific topic, and it is expected that students will choose to attend the sessions that are most relevant to their course selections and research. Additional details on material to be covered will be forthcoming at the incoming student orientation.

Students must sign up for any sessions they plan to attend by Friday, June 24 or some sessions may be cancelled. Sign up at <http://goo.gl/forms/oiMeKzA75xxJ4uAl1>.

Sessions will held in Clark 271 from 10:00-11:30 AM (except 7/29 in Clark 331).

Monday 11 July	Algebra
Wednesday 13 July	Differentiation (including vector derivatives)
Friday 15 July	Integration in single and multiple dimensions
Monday 18 July	Programming in python
Wednesday 20 July	Linear Algebra + some MATLAB
Friday 22 July	Probability, statistics + more MATLAB
Monday 25 July	Ordinary Differential Equations, part 1
Wednesday 27 July	Ordinary Differential Equations, part 2
Friday 29 July	Scaling + non-dimensionalization
Monday 1 August	Partial Differential Equations, 1 st order and higher
Wednesday 3 August	More PDEs + Green's Function
Friday 5 August	Fourier and Laplace transforms

Instructors:

July 11, 13, and 15	Jay Brett
July 18, 20, and 22	Hannah Mark
July 25, 27, and 29	Jimmy Bramante
August 1, 3, and 5	Madeleine Youngs