Math 5220 - Introduction to Representation Theory, Fall 2016.

Text: J. Frank Adams, Lectures on Lie Groups, The University of Chicago Press, 1982.

Meeting time and place : Tue, Thu, 9:30-10:45, MONT 245.

## **Contact information:**

- Email: jerzy.weyman@uconn.edu
- Office: 329 MONT.
- Phone: 860-486-3844.
- Office hours: Tue, Thu, 2-3:30pm.

## Midterms:

- 1-st, Friday, October 9, in class.
- 2-nd, Friday, November 6, in class.

## Grading.

Grading will be based on homework. There will be three-four homework assignments.

## Course description:

The course will provide an introduction to the theory of compact Lie groups and their representations. We will try to stress concrete examples, mostly of classical groups. We will depart from the book by taking a detour to prove the existence of an invariant measure on a compact Lie group, and then when discussing the root systems. We will proceed at the pace appropriate for the participants. If the time is short we will skip some of the proofs.