

# Math 7855 - Knot Theory

University of Utah

Spring 2008

## 1 Basic Information

**Supervisor** - Dan Margalit

**Coordinator** - Dylan Zwick

Email - [margalit@math.utah.edu](mailto:margalit@math.utah.edu), [zwick@math.utah.edu](mailto:zwick@math.utah.edu)

Webpage - [http://www.math.utah.edu/~zwick/Knot\\_Theory](http://www.math.utah.edu/~zwick/Knot_Theory)

**Meeting Time** - M 3:30 PM - 5:00 PM

Meeting Location - LCB 222

**Textbooks** -

*The Knot Book* by Colin C. Adams

*Knots and Links* by Peter Cromwell

*Knot Theory* by W.B. Raymond Lickorish

## 2 Course Description

This is kind of an experimental class. It's designed as a student organized and student taught class on something interesting in mathematics that isn't part of the standard graduate curriculum. It is, of course, not designed as preparation or background for further resource. Basically, the idea behind the class is that there are a bunch of very interesting topics in mathematics that many of us are probably interested in, but we don't really have much opportunity to learn about them outside of self study. So, the hope for this class, and if it's a success for future classes like it, is that we can gain some competence in an area of math that we're interested in,

but that perhaps we don't want to pursue professionally. A broad range of knowledge certainly doesn't hurt.

As I said, the class is student taught and so we'll all take turns giving lectures. Besides having to prepare a lecture we'll pick out some homework problems every week, divide them up between us, and then when you're done with them you can send them to me and I'll compile them.

I've been talking about a name for this class, or for even this type of class, and Matt Housley suggested "Graduate Student Broadening Studies." I think GSBS is an excellent acronym!

I'll also be maintaining a webpage for the class where we can post homework and whatnot.

## 2.1 Grades

If you participate, and you're name is not Julian Chan, you get an A.

## 3 Schedule

We'll be working through parts of three books, of increasing difficulty and mathematical sophistication.

**January 7th** - Introduction.

**January 14th** - Chapters 1-2 of Adams.

**January 21st** - MLK Day

**January 28th** - Chapters 3-4 of Adams.

**February 4th** - Chapter 5 of Adams.

**February 11th** - Chapter 6 of Adams.

**February 18th** - President's Day

**February 25th** - Chapter 2 of Cromwell

**March 3rd** - Chapter 3 of Cromwell

**March 10th** - Chapter 4 of Cromwell

**March 17th** - Spring Break

**March 24th** - Chapter 5 of Cromwell

**March 31st** - Chapter 6 of Cromwell

**April 7th** - Chapter 7 of Cromwell

**April 14th** - Chapter 2 of Lickorish

**April 21st** - Chapter 3 of Lickorish