

Project NExT Capstone Panel

The Trinity University Capstone Experience

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AMS-MAA Joint Mathematics Meetings

January 16, 2010

San Francisco, CA

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A Quick Outline

- All about TU
- What my department does
- Before & After
- In the Works

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About the University

- 2500 student “Liberal Arts” Institution in San Antonio, TX
- Good student body
- Every department has capstone experience
- About 225 tenured/tenure-track faculty
- Large endowment

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About the Department

- $9\frac{1}{3}$ full-time faculty
- Graduate about 8-12 students per year
- 1/3 split: industry, grad school, education
- Most students are double majors

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Capstone Course Schedule

Currently, our majors are required to take a four-course sequence related to the capstone. All three courses are taught by one professor.

Math 2094: Majors' Seminar (taken twice)

Math 3194: Writing Workshop

Math 4394: Senior Project, a.k.a., The Capstone Experience

(We also have Maths 4398/4399: Honors Thesis.)

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Math 2094: Majors' Seminar

The goal of this course is to introduce students to mathematics outside of calculus.

- Meets one hour per week
- Speakers each week - outside faculty, TU faculty, industry, students
- Course is taken twice for no credit; grade based solely on attendance
- About 1/2 of the students are undeclared

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Math 3194: Writing Workshop

The goal of this 1-unit course is to familiarize students both with reading/writing mathematics and the use of mathematical technology.

- Students must attend Majors' Seminar
- Students learn to use Latex, Matlab, Maple
- The grade is based on attendance, 20-minute Latex presentation on a math paper, and two talk write-ups

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Math 4394: Senior Project

The goal of this course is letting students exhibit a deeper understanding of a topic in (almost) any area of mathematics.

- Students must attend Majors' Seminar
- Students find an advisor and work on a “problem”
- Students give a 30-minute latex presentation at semester's end
- Grading done by advisor and instructor
- Honors Thesis (Math 4398/4399)

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Before & After

- What it was like when I got to TU in 2006
- What it is like now
- What we had to do - Departmental Attack Plan; Technology Resources

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Future Plans

Scheduling: Current Schedule: 2094 - 2094 - 3194 - 4394

Proposed Schedule: 2094 - 3194 - 3195 - 4094 - 439

Grading: Departmental

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The End

Thanks for listening, and feel free to ask questions (at the appropriate time, of course).

Thanks to Tom, Russell, and Karrolyne for having me.