# Laura Anne Taalman

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## Education

#### Ph.D. in Mathematics, Duke University, 1999

Anticipate completion and defense of dissertation in May.

Master of Science in Mathematics, Duke University, 1996

Bachelor of Science in Mathematics, University of Chicago, 1994

### Skills

#### **Problem Solving**

Excellent analytical and logical reasoning skills. Able to multi-task. Can learn new skills quickly. Able to lead or work within a group environment.

## Computer Languages

Some experience with C++, HTML, Java, LISP, Pascal. Can become proficient in any of these (or other) languages upon request.

#### Other

Creative, motivated, innovative, stunningly beautiful. LATEX, mathematical ability (obviously). Teaching skills.

### Employment, Duke University

#### **Instructor of Mathematics**

Spring 1996 to present

Preparation and presentation of lectures, supervision of group work, writing and grading tests and quizzes, grading projects and papers, preparing and grading the final exam for the course. For some of the courses it was also necessary for me to create my own syllabus, as well as choose (or create) all of the homework problems, worksheets, and labs. Math 25L and 26L are laboratory ("reform") calculus courses; Math 19 and 104 are standard ("traditional") courses.

Math 19	Precalculus	Summer 1996
Math $25L$	Calculus-Precalculus I	Fall 1996, Fall 1997, Fall 1998
Math 26L	Calculus-Precalculus II	Spring 1996, Spring 1997, Spring 1999
Math 104	Linear Algebra	Summer 1997

#### Course Development

Summer 1997, Summer 1998

For the past two years I have spent my summers designing and developing Math 25L and 26L. This includes writing new syllabi and developing course materials, policies, homework assignments, labs, and worksheets. Each year my work (and the work of Jack Bookman) has resulted in a sizable "Coursepack" used by all sections (for 25L in 1997, and 25L-26L in 1998).

GRE Instructor Spring 1998

Taught two three-week short courses in GRE preparation to a diverse population of students.

Lab Instructor 1994-5, Fall 1995

Taught and supervised weekly Calculus "Labs" (calculator applications of the class material from that week) for 31L, 32L, and 25L; jobs included short lectures, helping the students with the material, calculator "troubleshooting", and grading quizzes, projects, and reports.

Calculus Tutor Fall 1994 to present

Staffed weekly university "Help Room" where students go for help in the undergraduate Calculus courses (25L-26L and 31L-32L).

# Employment, University of Chicago

Teaching Assistant 1991-4

Ran discussion/problem/review sessions twice a week that augmented the basic first-year Calculus course, graded papers and quizzes, some guest lecturing.

### Counselor, Young Scholars Program (YSP)

Summer 1994 and 1995

Gave lecture/discussion sessions and ran the computer lab. YSP presents talented high school students with upper college-level mathematics and computer science material, namely finite fields and chaos theory in 1994, and knot theory and neural networks in 1995.

#### Organizer, SESAME Conference

Summer 1994

"SESAME" is a program for elementary and high school teachers; participants in the program attend a series of lectures and computer labs. My job was both to help organize and coordinate the program, and to run computer labs in Mathematica and Geometer's Sketchpad.

Research Assistant 1993-4

Worked with Professor Paul Sally; constructed models of polygons suitable for tessellation.

College Core Tutor

1993-4

Part of university tutoring staff that provided assistance to students in the core mathematics classes.

## Other Employment

#### LaTeX Typesetting

1996 to present

Conversion of mathematical or scientific papers into photo-ready documents. Jobs have included work for Triangle Universities Nuclear Laboratory and papers in Computational Geometry.

#### **Private Mathematics Tutor**

1990 to present

Private mathematics tutor for various high school, undergraduate, and graduate math courses.

# Conferences

### Park City Mathematics Institute

Summer 1997

Three week conference on Symplectic Geometry and Topology in Park City, Utah.

### Institute for Advanced Study

Summer 1997

Park City Women's Program in Symplectic Geometry and Topology in Princeton, New Jersey.

## REU, University of Indiana

 $Summer\ 1993$ 

Research Experience for Undergraduates; independent research (knot theory), lectures, thesis.

# **Awards and Honors**

# L.P. and Barbara Smith Award for Excellence in Teaching

May 1998

Sole recipient of the highest graduate student teaching award given by the Mathematics Department.

### Dean's Award for Excellence in Teaching

 $April\ 1997$ 

One of two recipients (university-wide) of this annual award from the Graduate School. Teachers must be nominated by their students (who write essays justifying the nomination) to be eligible for this award.

### Departmental Teaching Award

August 1997

Annual award given by the Mathematics Department to graduate students who demonstrate excellence in teaching.