Welcome from your graduate coordinator

Jean A. Larson
August 19, 2015
I. Key people for your academic program

You
Your advisor and your committee, when you have them
Your professors, including your faculty mentor
Your fellow graduate students, including your graduate student mentor

Graduate coordinator: Jean A. Larson
Graduate secretary: Stacie Austin
Office manager: Margaret Somers
Other department staff: Connie Doby, Sandy Gagnon
The coordinator of the course for which you are a TA
Supervisor of TAs: Kevin Knudsen
II. Our Programs
MS in Mathematics (exam option)

Sample Schedule

<table>
<thead>
<tr>
<th>MS</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>MAS 5311</td>
<td>MAS 5312</td>
<td>MAT 6905</td>
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<tr>
<td></td>
<td>MAA 5228</td>
<td>MAA 5229</td>
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<tr>
<td></td>
<td>MTG 5316</td>
<td>MTG 5317</td>
<td></td>
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<tr>
<td>Year 2</td>
<td>MAS 6331</td>
<td>MAS 6332</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MTG 6346</td>
<td>MTG 6347</td>
<td></td>
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<tr>
<td></td>
<td>6000+ elective</td>
<td>6000+ elective</td>
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</tbody>
</table>

Key points: Pass First Year Exams, take 18 credits of 6000+ courses (but independent study does not count); if continuing to PhD, take 2 sequences leading to PhD exams, here algebra and topology. The degree is sometimes called an “incidental master’s” for people in the PhD program.
## II. Our Programs
MS in Applied Mathematics (exam option)

### Sample Schedule

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<tr>
<th>MS</th>
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<td></td>
<td>MAA 5228</td>
<td>MAA 5229</td>
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<tr>
<td></td>
<td>MAD 6406</td>
<td>MAD 6407</td>
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</tr>
<tr>
<td>Year 2</td>
<td>MAA 6616</td>
<td>MAA 6617</td>
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<td></td>
<td>COP 5405</td>
<td>MAP 6208</td>
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<td></td>
<td>STA 6236</td>
<td>STA 6237</td>
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</table>

Key points: Pass First Year Exams, design package for approval by graduate committee which combines 6000+ math courses with electives in allied fields. In this example, Analysis of Algorithms in computer science is combined with theoretical statistics, optimization and numerical analysis, and two sequences leading to PhD Exams are included.
## II. Our Programs

### MST

#### Sample Schedule

<table>
<thead>
<tr>
<th>MST</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
</table>
| Year 1 | MAS 5311  
MAD 6406  
sci minor | MAS 5312  
MAD 6407  
ed elective | MAP 5304  
MAE 6943 |
| Year 2 | MAA 5228  
ed elective  
sci minor | MAA 5229  
ed elective  
math elective | MAE 6943 |

Key points: Twenty-four credits of 5000+ mathematics, three 5000+ education courses in three different categories chosen in consultation with the graduate coordinator, two semesters of internship in college teaching, and a six credit minor in another science.
II. Our Programs
PhD

Overview of the PhD Program

Knowledge of mathematics

Foundational:
First year algebra, analysis, topology
(numerical linear algebra, numerical analysis)
First Year Exam - pass 3 of 6 parts

Breadth: 21 credits in distribution requirements
Extent: 36 credits 6000+ courses, 90 credits overall
Depth: Qualifying exam (written part + oral part)

Original research (the dissertation)

Qualifying exam
Final oral exam
II. Our Programs
PhD Milestones

First year
5000 algebra/analysis + elective courses, first year exams

Second year
Form a doctoral committee, pass approved PhD exam
Finish master’s degree by December following second year

Third year
Develop thesis topic
Pass language exam, oral part of qualifying exam

Fourth year
Continue research
Complete breadth part of distribution requirement

Fifth year
Complete research and write up dissertation
Apply for a job and graduate
III. Research areas

- Algebra/Number Theory/Combinatorics
- Analysis/Functional Analysis/Probability
- Applied Math: Bio Math, Imaging, Optimization, PDE
- Topology/Foundations: Dynamical Systems, Logic
III. Research areas

Algebra: Crew, Keating, Sin, Turull
III. Research areas

Number Theory: Alladi, Berkovich, Garvan
III. Research areas

Combinatorics: Bona, Vatter, Vince
III. Research areas

Analysis: Brooks, Chen, Jury, McCullough, Rao, Robinson, Shen, Summers
III. Research areas

Biomath: Keesling, Martcheva, Pilyugin
III. Research areas

Numerical Analysis/Optimization: Hager, Mair
III. Research areas

Imaging, Data Analysis, PDEs: Chen, Hager, Zhang
III. Research areas

Topology/geometry/dynamical systems: Block, Boyland, Bubenik, Dranishnikov, Groisser, Keesling, King, Knudsen, Rudyak
III. Research areas

Logic/set theory: Cenzer, Larson, Porter, Zapletal
IV. Rhythm of the year

**Fall semester**

- First year and PhD exams offered prior to start of the semester
- Year long sequences begin
- Number of courses and students taught at a max
- Multiple long weekends:
  - Labor Day
  - Homecoming (Veteran’s day)
  - Thanksgiving
- Fill out progress form around November
- Holiday party at end of the term
- Finals end in mid-December
IV. Rhythm of the year

Spring semester

Classes resume January 5, 2016
Some year long sequences may not continue
First Year Exams before/early in semester
PhD written exams only by petition
Graduate committee interviews starting second week of classes
Holidays concentrated in spring break week
Spring Gala at the end of the spring semester with teaching awards, recognition of student leaders, lists of graduate degrees awarded
Classes end April 20, finals end April 29.
IV. Rhythm of the year

Summer – two short sessions
First Year/PhD exams offered before/early in summer A
Most students do individual work:
   MAT 6905, MAT 6910, MAT 7979, MAT 7980
Many members of the department travel
Number of courses offered is at a minimum
TA support varies
Having a master’s degree helps for summer teaching
V. Student groups

SIAM Gators: Current president Omar Saucedo
V. Student groups

Graduate Math Association (GMA) Officers:
V. Student groups

GMA Colloquium