Math Masters Program

What Happens Now?
What about the Exams?
How do I graduate?

Thanks to Will Tran for this template on the Comp Exams, and some of his slides!
# Quarter Catalog versus Semester Catalog

<table>
<thead>
<tr>
<th>QUARTER CATALOG</th>
<th>SEMESTER CATALOG</th>
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<tbody>
<tr>
<td>Math 3xxx, 4xxx, 6xxx classes count towards degree.</td>
<td>Only Math 6xx (graduate courses) count.</td>
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<tr>
<td>Comp Exams = NO units</td>
<td>Math 692 = 2 units</td>
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<td>Math 6005 = 1 unit</td>
<td>No units for Math 605</td>
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<tr>
<td>Need 45 Quarter Units</td>
<td>Need 30 Semester Units</td>
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Quarter versus Semester Catalog

• Cannot pick and choose what you want from each “catalog”

• If you have been taking classes under the Quarter system and want to use those units, and any exams you have already taken, then stay with the Quarter Catalog. This is the default option.

• Your degree will specify “Pure” or “Applied” option.
Comprehensive Exams – Quarter System

• The Quarter System of exams will continue this year.
  • **Pure Math (OPTION I):** Algebra, Real Analysis, Complex Analysis, Topology
  • **Applied Math (OPTION III):** Probability, Applied Analysis, Numerical Analysis, Linear Programming
Logistics

• Comp Exams will be given during the Math 692 meeting time: Fridays, 9am-11:50am, Sci S149.
• Mid-Semester: NOVEMBER 2:
  • Complex, Algebra
  • Probability, Linear Programming
• End-Semester: DECEMBER 7
  • Real Analysis (Math 630), Topology
  • Numerical Analysis (Math 670), Applied Analysis (Math 675)
Logistics - Continued

• If you are taking TWO of the exams it is possible that they will be given
  • In the morning and afternoon on the same day (Nov. 2, Dec. 7)
  • Two Fridays apart (Nov. 2 & Nov. 9; Nov. 30 & Dec. 7)
  • EVERYONE will take the same exam at the same time.
How should I study for the exams?

1. Look up previous exams online.
2. Find a study buddy – don’t try to study on your own.
3. Do all the problems yourself – explain solutions to your study buddies.
4. Study tactic: devote each study day to focusing on just 1 type of problem.
5. Make sure you understand all the topics that may be tested.
6. Predict what will be on the comp.
More on How should I study for the exams?

- Write up full solutions to problems.
- Email them to a faculty member to get feedback.
- LISTEN to their feedback. Maybe try two faculty members.

GET STARTED SOON! Don’t wait until a week before. Spread out the study time.
Review Sessions

• I can run several review sessions on Fridays, 9am-noon, Sci S149
  • Numerical Analysis
  • Differential Equations
  • Linear Programming
• Other students can run review sessions in this room on Fridays, 9am-noon. I can help advertise.
How do I sign up?

I have sign up sheets that you will fill in TODAY. Registration is now at the BEGINNING OF THE SEMESTER.
Courses to prepare for PURE Option

Algebra
- Math 4121/6121: Advanced Algebra
  - MATH 620

Real Analysis
- Math 3300: Analysis I
  - Math 3301: Analysis II
  - MATH 630

Complex Analysis
- Math 6339: Complex Variables (grad)
  - MATH 640

Topology
- Math 6200: Topology I (grad)
  - MATH 660
Courses to prepare for APPLIED Option

Probability
- Stat 6204: Probability Theory

Applied Analysis
- Math 3361: ODEs
- Math 4361: PDEs
- Math 3300/3301: Analysis I/II
- MATH 630
- MATH 675

Numerical Analysis
- Math 3750: Numerical Analysis I
- Math 4750: Numerical Analysis II
- MATH 670

Linear Programming
- Math 3841: Linear Programming
- MATH 680
### Classes For 2018-2020

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<thead>
<tr>
<th></th>
<th>2018-19</th>
<th>2019-20</th>
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<tbody>
<tr>
<td>Real</td>
<td>Analysis (630) (PM)</td>
<td>Real Analysis (630)</td>
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<tr>
<td>Algebra</td>
<td>&amp; Lin Alg (620)</td>
<td>Algebra &amp; Lin Alg (620) (PM)</td>
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<tr>
<td>Numerical</td>
<td>Analysis (670)</td>
<td>Numerical Analysis (670) (PM)</td>
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<tr>
<td>Optimization</td>
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<tr>
<td>Differential Equations</td>
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<tr>
<td>Elective</td>
<td>(PM)</td>
<td>Complex (640)</td>
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<tr>
<td>Elective</td>
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<tr>
<td>Capstone</td>
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Questions?