

**IMPORTANT UPDATE TO AXIOMS FOR ENTERING  
STUDENTS 2018-19**

The Department of Mathematics and Statistics has voted to approve a proposal to significantly change our exam requirements for students admitted Fall 2018. The proposal is currently before the faculty senate.

The new requirements will be as follows:

- (1) Each student must complete an examination in Advanced Calculus and Linear Algebra by the beginning of their fourth semester. This exam will be offered three times a year in August, January and May.
- (2) Each student must complete two examinations based on the the first year course sequences by the beginning of their fourth semester. Exams will be offered in Algebra (Math 611-612), Analysis (Math 623-624), Applied Mathematics (Math 645-646), Probability (Math 605-606), Statistics (Stat 607-608) and Topology (Math 671-672). These exams will be offered twice a year in August and January.
- (3) Each student must complete an oral examination by the mid-semester date of their sixth semester. This exam will be governed by the following rules:
  - (a) By the end of a student's fourth semester, they must name a three person exam committee of faculty in the department. One member will be designated as the chair.
  - (b) The student and the committee will draw up a list of topics for the exam.
    - (i) The list should be roughly equivalent to 6 credits worth of material selected from 9 credits worth of courses.
      - (A) Typically the 9 credits will break down as 3 credits from a second year course, 3 from a reading course with a member of the committee and 3 from either source.
      - (B) The topic list will then be further refined to reflect approximately  $2/3$  of the material from each course.
    - (ii) The committee member(s) responsible for second year course material need not be the actual instructor of the course which the student took, although they should be qualified to teach it.
    - (iii) The topic list must be approved by the GPD.
  - (c) The exam may be scheduled by the student at any time after the relevant courses have been completed and at least one month after approval of the topic list by the GPD.
  - (d) The exam may be a combination of a presentation by the student and questions from the committee, with the presentation portion not to exceed half of the time of the exam; or it may consist entirely of questions.
  - (e) The exam length will be between one to two hours depending on the judgment of the committee.

- (f) The committee will decide after the exam on a recommendation to the GAC. A passing recommendation must be a unanimous decision of the committee.
  - (i) The chair of the committee should promptly submit a short (approximately one page) review of the exam to the GAC explaining the recommendation.
  - (ii) The GAC will determine whether or not to accept the recommendation of the committee. The GAC retains the ultimate authority to determine the results of the exam but expects to override the committee's recommendation only in unusual circumstances.
  - (iii) The GPD will notify the student of the final decision.

In addition, the course requirements for a Ph.D. will become:

- (1) 36 credits (12 courses)
- (2) Complete at least three of the first year sequences:  
605-6, 611-2, 623-4, 645-6, 671-2, Stat 607-8
- (3) Take Math 621
- (4) Take at least one of: 611, 623, 671
- (5) Take at least one of: 645, 646, 651
- (6) Take at least one of: 605, 606, Stat 607
- (7) M.S. requirements remain unchanged: 10 graduate courses, at least 7 in Math/Stat