

Math at Caltech

SFC Math Committee

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Members

Students

- Abhi Gulati
- Casey Jao
- Jeff Kuan
- Ila Varma

Faculty

- Alexei Borodin
- Eric Rains
- Eric Ryckman

Sources

- Math Option Survey 2009
 - Input from 63% of math majors
- 2007 SFC Report on Math & ACM
- Questions originated from students' ideas & 2007 SFC
- Suggestions made from survey results and faculty input & advice

Ma 5: Intro. to Abstract Algebra

- 2007 Survey:
 - 50% of math majors take this class as a freshman
- 2009 Survey:
 - 60% believe Ma 5 should be taken freshman year
 - 52% want Ma 5 to be easier for prospective math majors to take freshman year
- Suggestions
 - Changing the catalog
 - Holding Reviews/Sections to make “freshman friendly”

Ma 98: Reading Courses

- Survey (2009)
 - 52% want to do research during the school year
 - 31% don't believe there are enough opportunities
 - Specific Concern: Courses are at most offered once per year
 - 52% are interested in doing a reading course
- Suggestions:
 - Advertise availability to students (website, how-to, etc.)

Other Courses (Exams)

- Weight:
 - 43% suggest net exams to be worth 20-40%
 - 31% suggest net exams to be worth 40-60%
- Length:
 - 4 hours for tests is ideal
 - 5-6 hours is too long & tedious
- Suggestion: Shorter tests (or breaks/infinite time)

Undergraduate Seminar

- Survey (2009)
 - 80% interested in attending a seminar/pizza course taught at an undergraduate level
- Suggestions:
 - Begin 3rd term with biweekly or monthly seminars given by faculty and/or graduate students.
 - Funding & partnership with Math Club

Other Student Opinions

- Students like the amount of interaction with faculty (including accessibility outside of class)
- In comparison to other options, students like ombudsmeetings and the website
- Well-designed option, very flexible but builds a solid foundation

Final Comments

- Presented a few suggestions and ideas to make the math option better for younger generations:
 - Ma 5 availability to freshman
 - Ma 98 (Reading Courses)
 - Undergraduate Seminar
 - Information on Exam length and weight
- There may be more potential areas for improvement
- Open for discussion (now)

Thanks

- To all of the professors who attended our meetings and helped us learn
- To the committee members for their time and dedication towards improving their options
- To the SFC & ARC for having this conference and allowing us to express our opinions
- To all of you for attending and voicing your opinions