Fall 2011 Departmental Meeting

Thursday, September 1
4:40 p.m.
305 Carver Hall
Agenda

1. Welcome
2. Introductions of New People
3. Announcements
4. State of Departmental Programs
5. State of the Department
Introductions
New Faculty

Steve Butler            Hien Nguyen
Introductions
New Lecturer

Lydia Chan      Cathy Kaspar      Adrian Jenkins
Introductions

New Postdocs

Jonas Kibelbeck  Michael Pollack  Sijia Liu
Introductions
Visiting Scholars

Tai Gab Ha

Haijun Wang
Returning from Sabbatical

Domenico D’Alessandro spent last year at the University of Minnesota, Minneapolis, studying enumerative geometry and string theory.
Returning from Sabbatical

Ryan Martin spent last Fall working on a variety of problems related to edit distance and hereditary properties of graphs. He traveled to Budapest, Urbana-Champaign, Richmond, Virginia and Newark, Delaware.
Returning from Sabbatical

Yiu Poon attended the International Linear Algebra Society meeting in Pisa, Italy; the Workshop on Numerical Range and Numerical Radius in Krakow, Poland; and two conferences in China during his FPDA.
On FPDA this year

Paul Sacks will spend two months as a Visiting Fellow of the Isaac Newton Institute for Mathematical Sciences in Cambridge, UK, taking part in the institute’s Inverse Problems program. In addition he will spend two weeks at Dokuz Eylul University in Izmir, Turkey for research collaboration, as well as attending several other mathematics conferences in Europe.
Other Excused Absences

Tasos Matzavinos  Maria Axenovich  Sunder Sethuraman
New Graduate Students

Marie Archer
USA
Columbia College

Zhanar Berikkyzy
Kazakhstan
Suleyman Demirel U & UNI

Jacqueline Chalmers
USA
Augustana College

Kubilay Dagtoros
Turkey
Cukuova U & U of Kansas
New Graduate Students

Luis Garcia
USA
Iowa State University

John Herr
USA
Creighton University

Josh LaGrange
USA
Iowa State University

Jiali Li
China
Hubei U & Shanghai U
New Graduate Students

Xavier Martinez  
Puerto Rico  
University of Puerto Rico-Mayaguez

Monalisa Munsi  
India  
Jadavpur & IIT-Kharagpur

Steven Noren  
USA  
Concordia College
New Graduate Students

Kevin Palmowski
USA
SUNY at Genesco

Hannah Park
USA
Iowa State University

Chelsea Sackett
USA
Iowa State University
New Graduate Students

Kelcey Uherka  
USA  
Morningside College

Feifei Wang  
China  
University of Science & Technology - China

Zheng (John) Zhong  
China  
Iowa State University
Announcements

Departmental Information Meeting
Wednesday, September 7 at 4:10 p.m. in 305 Carver

Departmental Picnic
Sunday, September 18 at 5:00 p.m., McCarthy Lee Park, Butternut Shelter

Research Stories
Research and general interest stories for publications
Faculty, lecturers, postdocs, graduate students
Talk to Sue Ellen and Andrew Moran
State of Departmental Programs: Graduate

Cliff Bergman
State of Departmental Programs: Graduate Program Enrollment

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total enrollment</td>
<td>90</td>
<td>15</td>
</tr>
<tr>
<td>Ph. D.</td>
<td>79</td>
<td>12</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>9</td>
</tr>
<tr>
<td>Underrepresented</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>International</td>
<td>37</td>
<td>6</td>
</tr>
<tr>
<td>Funded</td>
<td>82</td>
<td>15</td>
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State of Departmental Programs: Graduate Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Total</th>
<th>First year</th>
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<tbody>
<tr>
<td>Mathematics</td>
<td>64</td>
<td>11</td>
</tr>
<tr>
<td>Applied Mathematics</td>
<td>26</td>
<td>3</td>
</tr>
<tr>
<td>BC B</td>
<td>1</td>
<td>1</td>
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# State of Departmental Programs:
**Graduate Core Course Enrollment**

<table>
<thead>
<tr>
<th>Course</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra (504)</td>
<td>19</td>
</tr>
<tr>
<td>Linear Algebra (510)</td>
<td>27</td>
</tr>
<tr>
<td>Analysis (515)</td>
<td>17</td>
</tr>
<tr>
<td>Appl. Math. (519)</td>
<td>12</td>
</tr>
<tr>
<td>ODEs (557)</td>
<td>Canceled</td>
</tr>
<tr>
<td>Num. Anal. (561)</td>
<td>17</td>
</tr>
</tbody>
</table>

- 501 (6) 407/507 (25) 554 (17) 565x (15) 601 (5) 607 (19) 617 (12)
- 655 (9)
- 666-canceled, replaced with 610-9
State of Departmental Programs: Graduate

Degrees awarded F10 – SS11

7 PhD
5 MS
State of Departmental Programs: Master of School Mathematics Program

Heather Bolles
State of Departmental Programs:
Master of School Mathematics Program

Two courses were offered as a part of the MSM program this summer:

• Stat 410X (6 credits) taught by Amy Froelich
• Math 540A (1 credit) taught by Heather Bolles
State of Departmental Programs: Master of School Mathematics Program

A total of 22 students completed coursework offered by the Master of School Mathematics program this summer.

- 8 students completed their 3rd summer of coursework
- 2 students completed their 2nd summer of coursework
- 4 students completed their 1st summer of coursework
- 8 students who are not officially MSM students – but took one or both of the courses for additional graduate credit in mathematics and/or statistics

5 students consistently attended the courses on-campus while the other primarily participated live off-campus. All the teachers enrolled were from Iowa.
State of Departmental Programs:
Master of School Mathematics Program

2 graduate students completed their degrees this summer

A third completed his final oral exam last week and will officially graduate this fall.

Another student is on schedule to finish her degree this fall, and nine plan to graduate next summer.
State of Departmental Programs: Master of School Mathematics Program

Coursework for Summer 2012 includes

• Math 547 Discrete Mathematics and Applications (4 credits)
• Math 549 Intermediate Geometry (3 credits)
• Math 540B Mathematics Education Seminar (1 credit)

If you have interest in teaching a course in the MSM program, in working with a teacher on his/her creative component, or in contributing a topic you feel would be of interest to a teacher working on a creative component, please see me.
State of Departmental Programs: Undergraduate

Jim Wilson
State of Departmental Programs:
Undergraduate Mathematics Majors

~260 Majors; about 50% growth in 2 years

- Much interest in Financial Mathematics, Math Plus, Education
- More advisors needed
- Speakers You! Give me a topic for stimulating presentation and discussion in the Sprague Room
State of Departmental Programs: Instructional Mission

Jennifer Davidson
# Courseload Numbers

<table>
<thead>
<tr>
<th></th>
<th>Fall 2010</th>
<th>Fall 2011</th>
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<tbody>
<tr>
<td>No. of Students</td>
<td>7664</td>
<td>7953</td>
</tr>
<tr>
<td>Total SCH</td>
<td>25,379</td>
<td>27,658</td>
</tr>
<tr>
<td>% change</td>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>Date</td>
<td>8/21/10</td>
<td>8/29/11</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of students Fall 2010</th>
<th>No. of students Fall 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>471</td>
<td>479</td>
</tr>
<tr>
<td>141/2</td>
<td>873</td>
<td>815</td>
</tr>
<tr>
<td>150</td>
<td>927</td>
<td>1038</td>
</tr>
<tr>
<td>165</td>
<td>1205</td>
<td>1376</td>
</tr>
<tr>
<td>166 + 166H</td>
<td>805</td>
<td>791</td>
</tr>
<tr>
<td>265 + 265H</td>
<td>698</td>
<td>737</td>
</tr>
</tbody>
</table>
The Center for Excellence in Undergraduate Mathematics Education (CEUIME) is located in 408 Carver.

The outer office houses a reception area, books on calculus, teaching, problem solving and related materials.

408C: Elgin Johnston
408B: Heather Bolles

Drop by for a visit and to see the recent changes.
State of Departmental Programs: Center for Excellence in Undergraduate Mathematics Education
State of Departmental Programs:
Center for Excellence in Undergraduate Mathematics Education

Current projects and activities

• Analysis of five+ years of student data (from registrar)
• New ALEKS Placement Exam
• Redesign of 14x courses
• Undergraduate Student Problem Solving Seminar/Putnam training
• Problem of the Week
• Math Circle for Central Iowa Middle and High School students
• Seminar on teaching (Faculty/Grad Students)
• Invited speakers
• Interviews with downstream course instructors
• MyLabsPlus implementation
• Work with Iowa Community Colleges
• High School Mathematics Contest (February 11, 2012)
Update on State of the Department:
The Budget Year 2011-12

• Planned 2010-11-12 budget cut of 4.35% for 2 years - $75,000 pardoned

• Emergency teaching funds of $500,000

• $30,000 for hourly help (grading, help room)

• $70,000 for SMI (Special Mathematics Instruction for Math 14x students)

• 2 new TE faculty, 2 new lecturers for this fall

• 3 new TE faculty positions for Fall 2012, 2 new lecturer positions

• Total of 78.5 TA positions in 2011/12 vs. 74.5 in 2010/11, 69 in 09/10, and 65 in 2008/09

• Summer school profit and supplies and services
Update on State of the Department: Consequences for 2011-12

- All faculty teach regular course load

- TA, help room and grading support at same level as last year

- Faculty professional development funds at least $20,000

- Expectation of teaching reductions in Spring 2012

- Salaries ???