

PROJECT NEXt

NEW EXPERIENCES IN TEACHING

2001-2002 FELLOWS, BURLINGTON, VT

a program of

THE MATHEMATICAL ASSOCIATION OF AMERICA

Major funding is provided by

THE EXXONMOBIL FOUNDATION

THE DOLCIANI-HALLORAN FOUNDATION

THE AMERICAN MATHEMATICAL SOCIETY

THE EDUCATIONAL ADVANCEMENT FOUNDATION

We gratefully acknowledge their support.

2001-2002 Project NExT Fellows Burlington Program, July-August 2002

Except as noted, all sessions are in the Living/Learning Center on the University of Vermont campus. The Project NExT registration area is on the third floor of the Living/Learning Center.

TUESDAY, JULY 30

8:00 – 10:00 p.m. Social Event for all Project NExT Fellows and invited guests
Area outside Marsh Dining Hall

WEDNESDAY, JULY 31

7:00 – 8:00 a.m. BREAKFAST

8:15 – 9:30 a.m. TWO concurrent sessions

A. *Capstone Courses for Mathematics - A Swap Session*
CMS 315

Panelists: Sharon Crook, University of Maine
David Dempsey, Jacksonville State University
Kevin Dennis, Saint Mary's University of Minnesota

A capstone course/seminar is one that ties an undergraduate's four years of college together. In this session, Sharon Crook, David Dempsey, any other willing participant, and the organizer will share their experiences with capstone courses. The discussion will focus on the structure of the course, what topics are included in the course, what went right, and what would be changed.

Organizer: Kevin Dennis, Saint Mary's University of Minnesota

B. *Teaching Students to Write Proofs*
CMS 216

Panelists: Jon Hodge, Grand Valley State University
Patti Frazer Lock, St. Lawrence University
John Meier, Lafayette College
Tabitha Mingus, Western Michigan University
Daniel Solow, Case Western Reserve University

In recent years, an increased emphasis has been placed on the importance of writing in undergraduate mathematics courses, in particular the writing of proofs. The panelists for this session have conducted research and authored various works on this topic. Each panelist will give a short presentation, based on his or her research and personal experience, on teaching students to write proofs.

Organizers: Reza Akhtar, Miami University
Linda Eroh, University of Wisconsin - Oshkosh
Carmen Schabel, University of Portland

WEDNESDAY, JULY 31 (continued)

11:30 – 12:30 p.m. Small group discussions with other Project NExT Fellows.
[For these sessions we will be splitting geographically. Please attend the group that includes the state or province where your institution is located.]
Group A - AB, AK, AZ, CA, HI, ID, MT, NM, NV, OR, UT, WA, **CMS 216**
Group B - CO, IA, MN, ND, NE, SD, WY, **A102**
Group C - AR, KS, LA, MO, MS, OK, TX, **A162**
Group D - IL, WI, **B102**
Group E - IN, MI, OH, **B101**
Group F - DE, KY, PA, WV, **CMS 302**
Group G - AL, FL, GA, NC, SC, TN, VI, **A101**
Group H - DC, MD, Metropolitan NYC (ZIP codes 10000-11999 and 12400-12799), NJ, VA, **B132**
Group I - CT, MA, ME, NF, NH, NS, NY (ZIP Codes 12000-12399 and 12800-14999), RI, VT, **A161**

12:30 – 1:45 p.m. LUNCH

2:00 – 3:15 p.m. TWO concurrent sessions

A. *Making In-class Groups Work*
CMS 216

Presenters: Jack Bookman, Duke University
Priscilla S. Bremser, Middlebury College

Jack Bookman and Priscilla Bremser will each lead a 30-minute demonstration of an in-class group work activity for a mathematics course. Throughout the demonstration, the presenters will comment on various issues that arise in making groups work effectively in the classroom. This includes issues relevant to group work activities in both small and moderately sized classes. The session will conclude with questions from the participants.

Organizers: Hema Gopalakrishnan, Sacred Heart University
Joy Moore, University of Cincinnati
Amber Puha, California State University - San Marcos

B. *Attracting and retaining mathematics majors*
CMS 315

Panelists: Colin Adams, Williams College
Pat Kenshaft, Montclair State University
Jim Parks, State University of New York - Potsdam
Harriet Pollatsek, Mount Holyoke College

The panelists will discuss how to attract more mathematics majors by making mathematics appealing to undeclared first- and second-year students, and how to encourage those in calculus to continue taking mathematics courses. A question-and-answer session will follow the panel discussion.

Organizer: Christopher Simons, Rowan University

WEDNESDAY, JULY 31 (continued)

3:15 – 3: 55 p.m. **BREAK - adjacent to Marsh Life Sciences Building**

3:55 – 5:45 p.m. ***Closing Session***

Benedict Auditorium (Room 235), Marsh Life Sciences Building

Recognition of 2001-02 Fellows

Presentation: *Finding your Niche in the Profession*

Joseph A. Gallian, University of Minnesota, Duluth

Second Vice President, The Mathematical Association of America

7:30 – 9:30 p.m. ***Mathfest Opening Banquet***

Emerald Grand Ballroom, Sheraton Hotel

Master of Ceremonies: Underwood Dudley, DePauw University

Presentation: *Who is the Greatest Hitter in the History of Baseball?*

Joseph Gallian, University of Minnesota, Duluth

Project NExT Courses during the Mathfest

Four-hour courses meeting **4:10 - 6:00 p.m. on Thursday and Friday, August 1 and 2.**

See information for assignments.

A. *Making Liberal Arts Mathematics Meaningful*, Edward Burger, Williams College, and Michael Starbird, University of Texas, Austin.

Room B132

B. *Cooperative Learning in Undergraduate Mathematics*, William Fenton, Bellarmine University

Room A102

C. *Planning and Teaching Mathematics Courses for Teachers*, Ann Farrell, Wright State University

Room A162

D. *Teaching an Introductory Statistics Course*, Robin Lock, Saint Lawrence University

Room B102

E. *Getting Your Research off to a Good Start/Applying for Research and Education Grants*, Joseph Gallian, University of Minnesota, Duluth, and Lloyd Douglas, National Science Foundation

Rooms A101, A161

F. *Undergraduate Research -- How to Make It Work*, Aparna Higgins, University of Dayton

Room B132

