

PROJECT NEXt

NEW EXPERIENCES IN TEACHING

2000-2001 FELLOWS, MADISON, WI

a program of

THE MATHEMATICAL ASSOCIATION OF AMERICA

Major funding is provided by

THE EXXONMOBIL FOUNDATION

with additional funding from

THE AMERICAN MATHEMATICAL SOCIETY

THE DOLCIANI-HALLORAN FOUNDATION

THE EDUCATIONAL ADVANCEMENT FOUNDATION

We gratefully acknowledge their support.

2000-2001 Project NExT Fellows Madison Schedule

The Project NExT registration area is in the
Lobby on the basement level of Van Vleck Hall on the U. of Wisconsin campus

TUESDAY, JULY 31

8:00 – 10:00 p.m. Social Event for all Project NExT Fellows and invited guests
See signs in the registration area for location

WEDNESDAY, AUGUST 1

7:00 – 8:00 a.m. BREAKFAST

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

A. *Motivating Students*
B139, Van Vleck Hall

Panelists:

Steven Deckelman, University of Wisconsin-Stout, deckelmans@uwstout.edu

Douglas Ensley, Shippensburg University of Pennsylvania, deensl@ship.edu

Brigitte Servatius, Worcester Polytechnic Institute, bservat@wpi.edu

Paul Zorn, St. Olaf College, zorn@stolaf.edu

The panelists will discuss topics such as motivating students to work, to think mathematically, and to enjoy mathematics both in and beyond the classroom. We will also consider how to encourage individuals of underrepresented groups to become involved in mathematics and how to recruit and retain mathematics majors successfully. The discussion will be followed by a question and answer session.

Organizers: Maria Fung, University of Wisconsin-Stout, and David Weinreich, University of Wisconsin-La Crosse

B. *Undergraduate Mathematical Modeling Courses*
B231, Van Vleck Hall

Panelists:

Keith Howard, Kenyon College, howardk@kenyon.edu

Gavin LaRose, University of Michigan, glarose@umich.edu

Kathleen Snook, United States Military Academy, ak7056@usma.edu

Mathematical modeling provides a great opportunity to apply mathematics to real world problems. This session aims to provide some ideas on how to organize and deliver an undergraduate mathematical modeling course. The panelists will share their experiences and expertise on courses at a variety of skill levels. We plan to have a brief question and answer period at the end of the session.

Organizers: Jeffrey Denny, Mercer University, and Kyle Riley, South Dakota School of Mines and Technology

WEDNESDAY, AUGUST 1 (continued)

9:35 – 10:05 a.m. BREAK

10:10 -- 11:25 am TWO concurrent sessions

A. *Preparing to be Evaluated, and Learning From Your Evaluations*

B139, Van Vleck Hall

Panelists:

Ioana Mihaila, Coastal Carolina University, mihaila@mailbox.coastal.edu
Wayne Roberts, Macalester College, robertsw@macalester.edu
Daniel Schaal, South Dakota State University, Daniel_Schaal@sdstate.edu
Michael Stob, Calvin College, stob@calvin.edu
Shirley Wilson, North Central College, saw@noctrl.edu

This panel discussion will focus on what new faculty should know about preparing for tenure and related evaluations (i.e. pretenure and promotion). Topics will include, but will not be limited to, how to ascertain the administration's expectations for granting tenure, learning from student and colleague evaluations, how to prepare a self-evaluation, and common (and not-so-common) pitfalls to avoid. The panelists include mathematicians familiar with evaluations from both sides: some have recently gone through tenure or promotion evaluations, while others are, or have been, department chairs, deans, or members of faculty evaluation committees.

Organizers: Cameron Sawyer, Southwestern University, and Jennifer Ziebarth, Earlham College

B. *Using the Web Effectively in Teaching*

B231, Van Vleck Hall

Panelists:

Joseph Gregg, Lawrence University, joseph.n.gregg@lawrence.edu
Lawrence C. Moore, Jr., Duke University, lang@math.duke.edu
Darren Narayan, Rochester Institute of Technology, dansma@rit.edu
David A. Smith, Duke University, das@math.duke.edu

This panel will discuss a wide range of issues associated with using the world wide web in teaching mathematics. Given the advances in information technology, the web has become an integral part of teaching and research. This session will help to get you started with using the web for teaching. The discussion will include a) effectively using the web (creating an accessible homepage; creating weekly quizzes and homework assignments online; submission and grading; delivering lecture notes; scheduling online office hours); b) some good web resources for classes such as college algebra, calculus, differential equations, linear algebra, etc. and how to effectively incorporate these resources in teaching; and c) concerns regarding security issues (prevention of cheating).

Organizers: Eugenie Hunsicker, Lawrence University, and Padmanabhan Seshaiyer, Texas Tech University

WEDNESDAY, AUGUST 1 (continued)

- 11:30 – 12:30 p.m.** Small group discussions with other Project NExT Fellows (organized geographically)
Group A - AB, AK, AZ, CA, HI, ID, MT, NM, NV, OR, UT, WA – **B123, Van Vleck**
Group B - CO, IA, MN, ND, NE, SD, WY – **B135, Van Vleck**
Group C - AR, KS, LA, MO, MS, OK, TX – **B139, Van Vleck**
Group D - IL, WI – **B211, Van Vleck**
Group E - IN, MI, OH – **B215, Van Vleck**
Group F - DE, KY, PA, WV – **B231, Van Vleck**
Group G - AL, FL, GA, NC, SC, TN, VI – **B235, Van Vleck**
Group H - DC, MD, Metropolitan NYC (ZIP codes 10000-11999 and 12400-12799), NJ, VA – **B305, Van Vleck**
Group I - CT, MA, ME, NF, NH, NS, NY (ZIP Codes 12000-12399 and 12800-14999), RI, VT – **B309, Van Vleck**

12:30 – 1:45 p.m. LUNCH

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

A. *Unleash Your Mathematical Magnetism! (All About Attracting Math Majors)*

B139, Van Vleck Hall

Panelists:

Edward B. Burger, Williams College, eburger@williams.edu

Olympia Nicodemi, State University of New York-Geneseo,
nicodemi@geneseo.edu

Joseph Straight, State University of New York-Fredonia,
straight@cs.fredonia.edu

Martha L. Wallace, St. Olaf College, wallace@stolaf.edu

Robert L. Wilson, Jr., University of Wisconsin-Madison, wilson@math.wisc.edu

This panel discussion will be devoted to the general topic of attracting students into the math major. More specifically, the discussion will include departmental programs that help attract students, what to do if your department does nothing to attract students, and the question of whether (or in what proportion) to attract first-year students or recruit/steal them from other majors.

Organizers: Eric S. Egge, Gettysburg College, and Donna L. Flint, South Dakota State University.

B. *Discovery Learning*

B231, Van Vleck Hall

Panelists:

Charles Allen, Drury University, callen@drury.edu

W. Ted Mahavier, Nicholls State University, math-wtm@nicholls.edu

Carol Schumacher, Kenyon College, schumacherc@kenyon.edu

Reg Taylor, University of the Incarnate Word, traylor@universe.uiwtx.edu

The members of the panel will make brief statements regarding their experiences, opinions, and suggestions concerning discovery learning. This will be followed by a question and answer session.

Organizers: Joseph Evan, Kings College, Jonathan Hatch, Southeastern Louisiana University, and Patricia Kiihne, Illinois College.

WEDNESDAY, AUGUST 1 (continued)

3:15 – 3:45 p.m. BREAK

3:45 – 5:45 p.m. *Closing Session*
145, Birge Hall

Overview of special activities at the Mathfest

Recognition of 2000-01 Fellows

Presentation: *Finding your Niche in the Profession*

Joseph A. Gallian, University of Minnesota, Duluth

7:30 – 10:00 p.m. *Mathfest Opening Banquet*
Concourse Hotel

Project NExT Courses during the Mathfest

Four-hour courses meeting 4:10 - 6:00 p.m. on Thursday and Friday, August 2 and 3.

See information for assignments.

The afternoon shuttle buses between Witte Hall and Monona Terrace start at 3 p.m. on these two days. The Monona Terrace pick-up is at Main Entrance on Level 4.

A. *Making Liberal Arts Mathematics Meaningful*, Edward Burger, Williams College, and Michael Starbird, University of Texas, Austin.
B139, Van Vleck Hall

B. *The Highs and Lows of Technology and Modeling in the ODE Course*, Michael Moody, Harvey Mudd College, **B231, Van Vleck Hall**

C. *Strategies and Ideas for Improving Math Courses Designed for Prospective Teachers*, Dale Oliver, Humboldt State University, **B305, Van Vleck Hall**

D. *Teaching Undergraduate Statistics: Active Learning, Data, and Concepts*, Allan Rossman, Dickinson College, and Beth Chance, California State University, San Luis Obispo, **B211, Van Vleck Hall**

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, **B215 Van Vleck Hall and B235 Van Vleck Hall**

F. *Undergraduate Research -- How to Make It Work*, Aparna Higgins, University of Dayton, **B135 Van Vleck Hall** on Thursday; **B223 Van Vleck Hall** on Friday.

