

# So You're an Advisor - Now What?

Sandra O. Paur
North Carolina State University
Math Department Honors Program Coordinator





#### We Will Cover

- Academic Advising
- Career Advising: Job or Grad School?
- Crisis Management
- The other stuff
  - Writing a good letter of recommendation
  - Keeping records
  - Payoff



#### 5 minute advisor

- Student pokes his head in the door and asks for whatever forms and signatures he needs to pre-register.
- Advisor asks "Who are you", signs and hands over the forms.



#### 10 minute advisor

- Student comes in with a course plan for next semester.
- Advisor checks to see that all courses satisfy some sort of requirement.
- Advisor signs forms and says "See you next semester".



#### Who Benefits?

- Student: Gets info and help needed to make informed decisions about education, career, life
- Department: Good advising retains majors and can attract them
- Institution: Good advising recruits students
- Profession: Math majors are declining nationwide (down 23% from 1994-2001)
- Advisor: Won't get you tenure but does help. It's fun, satisfying and you can make a real difference.



## Nuts and Bolts of Good Advising

- Be Prepared
- Know your student
  - One size does not fit all
  - You can't advise somebody you don't know
- Good planning is essential
  - First meeting is key
  - Subsequent meetings are just as important





## Be Prepared

- Know the basic requirements
- Know specifics about math classes
  - Which math classes are taken when
  - Which are the tough math classes
- Know where to go to get answers
  - Math majors handbook, course catalog
  - Undergrad advising coordinator, colleague
  - Counseling Center



## First Meeting is Key

- Setting it up
  - Email student, find a good time (> 20 min.)
  - Be on time
  - Make her feel welcome
- Tell her about you
- Find out about her
  - Motivation
  - Background
  - Ability level
  - Goals (education, career, life)
- Take notes



## First Meeting - 2nd half

- Tell him about
  - Math program (just an overview)
  - Special opportunities
  - Career/grad school possibilities
  - Math club/contests
  - Departmental, University tutoring resources
- Ask if he has any questions or concerns



## First Meeting- 3rd half

i.e. 1st Academic Advising Session

- Find out how he's doing in his classes
- Find out if anything's changed (minors, other majors, financial situation, summer school plans, career goals, etc)
- Do the Plan-of-Study



## Plan-of-Study

- List: (Note prerequisites and when offered)
  - Math classes needed
  - Other courses needed or wanted
- Do a table of remaining semesters
  - Put in courses
  - Work in special opportunities
- Look at final picture
- Ask if she has any questions



## Subsequent Meetings Vital

- Go over the questions again. It's essential to:
  - Ask how he's doing in his math classes.
    - Transition to 'proof' classes is tough.
    - The answer affects how you advise him.
  - Ask if any changes in majors, minors ...
  - Check post-grad plans again
- Update the Plan-of-Study
- Start career advising



## Really Strong Student

- Identifiers: Lot of AP credit, getting mostly "A's", doing well in beginning proof classes
- Suggestions:
  - Stronger courses (honors sections, grad classes)
  - Special opportunities (REU, Budapest, MASS, etc)
  - Grad school



## Really Weak Student

- Identifiers: Getting C's and D's or worse, having a really hard time in beginning proof class.
- Find out:
  - Why does he want to be a math major?
  - Does he still want to be a math major?
    - Yes. Find courses that are good for him. Identify his special skills.
    - No. Help him find another major.



#### Job or Grad School?

It's HIS decision

- It's YOUR job to:
  - Provide the information
  - Give suggestions
  - Provide a reality check, if needed



#### Jobs

- Tell him about the possibilities
  - MAA & SIAM profiles
  - Previous grads from your school
  - Look at job descriptions
- Show him how to prepare
  - Pick useful electives
  - Add appropriate minor or major
  - Do an internship
  - Consider Co-oping



## Jobs - Advising Seniors

#### Getting the job - Advise him on:

- Career Planning and Placement Center
  - Workshops on resume preparation, interview skills
  - Set up job interviews
- Alumni contacts
- Check out MAA, SIAM, AMS web sites



#### **Grad School**

- Tell her about the possibilities
  - Math or not math?
  - Ph.D. or MS or 5 year BS/MS?
  - Possible schools
  - Financial support including fellowships
- Show her how to prepare
  - Stronger classes, grad classes
  - Research, REU's
  - Budapest Semesters, Math in Moscow, MASS



### **Grad School-Senior Advising**

starting in 2nd semester junior year

#### Tell him about:

- GRE's
- Grad school rankings
- National Fellowships
- Loan him your copy of "Assistantships and Graduate Fellowships in the Mathematical Sciences"
- Recommendations and how to get them



#### **Grad School Decisions**

- Deciding where to apply (reality check again)
  - Talk to faculty and previous grads
- Decide where to go
  - Visit the school, talk to faculty and grad students



#### Student in Trouble

- Math class
  - Is it just one concept or the whole class?
- I need to drop this class (after the deadline).
- I'm failing all my classes, I can't sleep at night and I'm falling asleep in the daytime.



### Writing Recommendations

- Be honest with the student
  - If you can write a good letter, say so
  - If not, explain why not (tactfully) and help her find somebody else who can write a good letter
  - But realize: It all depends on what she's applying for.
- Be honest in your letter
  - Push the strong points
  - Put the weak points in perspective
  - Do comparisons



## Keep Records!

- What to keep
  - Transcripts
  - Letters
  - Resumes, awards won
  - Info on post-grad career
- Why?
  - Useful for writing recommendations (remember those comparisons?)
  - Useful for department and university



## They're not all successes

- They won't always take your advice
- They will make mistakes
- You will make mistakes



## The Payoff



#### Your advisee comes in and says:

- I got into: Budapest Semesters, \_\_\_REU, \_\_grad school.
   Thanks for telling me about it and encouraging me to do it!
- I got that job/internship! Thanks for writing a recommendation!
- I'm graduating this semester and thanks for all your help.
   I've really appreciated it.



#### Last Bit of Advice

## Go to Graduation!

- Congratulate your advisees and students
- Ask them to keep in touch
- Meet their parents



#### email and URL

#### Sandra Paur:

- sopaur@math.ncsu.edu
- www.math.ncsu.edu/honors
- www4.ncsu.edu/~sopaur/