

NC STATE UNIVERSITY



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# Preparing Graduate Students to Teach

# Goals of TA teaching training

- Prepare graduate students for teaching duties ranging from LA to teaching their own classes.
- Efficient methods for presenting mathematical concepts, grading, class organization, etc.
- Help students develop a teaching portfolio.

# Principal Activities

- 3-day intensive introduction to teaching mathematics a week before first year.
- Students are LA during first year. Paired with award winning teachers.
- Mathematics Teaching Assistant Seminar that meets 4-5 times each semester.
- 1-day workshop after first year.
- Faculty teaching mentors years 2  $\rightarrow$  n.
- University workshops: Graduate School's Certificate of Accomplishment in Teaching (CoAT).
- Preparing the Professoriate Program (PTP).

# 3-day Intensive Workshop

## Topics:

- effective ways to present mathematical concepts to students.
- effective ways to run a class.
- grading strategies.
- tutoring strategies.
- technology used in our courses to enhance instruction.
- departmental and university policy concerning student/instructor interactions.
- Cohort building.

# LA during first year

- Lecture assistant (LA) for award winning teachers.
- Observe their lectures and teaching methods.
- Duties: grading, tutoring and class organization.
- Opportunity to teach 1 or 2 modules with feedback of instructor.

# Teaching Assistant Seminar

## Sample Topics:

- classroom management strategies.
- instructional techniques.
- grading strategies.
- technology and instruction.
- grade papers together.
- Cohort building.

# 1-day workshop after first year

Aim: training for students who will be teaching a class independently for the first time.

Focused on skills needed by first time teachers:

- test writing.
- lesson planning.
- identifying and writing learning objectives, etc.

**Students are given many opportunities to practice presenting material.**

# Faculty teaching mentors

- Visits a couple of classes and give feedback.
- Advise with lesson planning.
- Look over exams.
- Look over grading and grades.
- Advice on class management, etc.
- Resource for any problems that arise with teaching.



# CoAT

- University workshops on effective teaching, creating a teaching portfolio and similar topics.
- Students who participate in 6 workshops receive the Graduate School's Certificate of Accomplishment in Teaching (CoAT).
- Students receive a notation on their transcript and a letter from the graduate school for their job applications.
- Our Math workshops count for 3.

# Preparing the Professoriate (PTP)

- Gives doctoral students and faculty the opportunity to develop a mentoring relationship centered around teaching an upper level course.
- Students observe the faculty in the fall.
- Students teach the same class in the spring with the faculty observing.
- Students participate in 7 out of 9 university wide seminars. Fall seminars focus on college and university teaching. Spring seminar topics address strategies for success as junior faculty.

# Foreign TAs

- Foreign TAs are encouraged to take a language class (if needed)
- Foreign TAs need to pass a language exam before they can teach their own class.
- Additional mentoring if needed.