

**Seminar and Practicum in the Teaching of College Mathematics**  
**MATH 5902**  
**Fall 2012**

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**Course Description from OSU Catalog.** Foundations of college mathematics teaching, including lecturing, grading, and exam preparation. Adapting classroom activities to better serve different types of learners. Current trends in mathematics education such as calculus reform, cooperative learning, and technology in the classroom.

**Course Prerequisites.** Graduate standing in mathematics or consent of instructor.  
Note. To be effective in achieving its goal of preparing college mathematics teachers for assignments during the Spring 2013 semester, members of the class must be able to communicate in English (written and oral) well enough to participate in all discussions and written assignments. Students who have inadequate English communication skills or who are taking, or who have recently taken, English 0003 should carefully consider their readiness for this course.

**Course Objectives.** For most of you this is your first semester of graduate study in mathematics at OSU and you are supported by the department with a Teaching Assistantship (TA). As the name TA implies, you will soon be responsible for teaching mathematics to college students. We regard your role as mathematics instructor very seriously and we want to help you prepare for this responsibility. Through your enthusiastic participation in activities such as regular seminar meetings, mentored classroom observations, preparation of course materials (e.g., syllabus, lessons, exams), appropriate use of technology, and instructional decision making (e.g., classroom management), we believe you will be ready to assume full responsibility for instruction during the 2013 Spring semester.

**Course Structure.** The principal elements of this seminar/practicum in support of meeting the course objectives are the following.

1. **Weekly Seminars.** You will be expected to complete all out of class assignments such as written assignments (syllabi, lessons, exams, papers, etc.) and retain them as part of your course portfolio.
2. **Classroom Practicum.** You will be placed with an experienced instructor who will serve as your mentor. You will be expected to attend/participate in all assigned activities prescribed by your mentor. You will be expected to maintain a log of your practicum experiences in your course portfolio; following each class meeting, you should write down your observations, questions, and reflections on the class session in your practicum log - these will be discussed in our regular seminar meeting each week. Your mentor will submit an evaluation of your performance at the end of the semester.

3. **Enthusiasm.** You will be expected to participate enthusiastically in all seminar and practicum activities.

**Course Materials.** I have designed special assignments that will be usually completed outside of the regular class meetings. I have been working on writing a textbook associated with this course for several years that can be used at similar institutions nationwide. *All rights are reserved; no part of these materials may be reproduced, in any form or by any means, without permission in writing from me, Douglas B. Aichele.* I truly appreciate all of your input as well as that from former students; my hope is that this book will make a real contribution to helping with the professional development of new teaching assistants.

1. **Course Portfolio.** Each of you is required to maintain a course portfolio (3-ring binder) which will contain your practicum logs and associated classroom materials, written assignments you will complete outside of the seminar class (syllabi, lessons, tests, etc), and materials related to the weekly seminar. Periodically, your portfolio will be submitted and assessed.

2. **Optional Textbooks.** You may also wish to purchase the following books.

- a. *Teaching First - A Guide for New Mathematicians* by Thomas W. Rishel. MAA, 2000. ISBN: 0-88385-165-2.
- b. *Teaching American Students - A Guide for International Faculty and Teaching Assistants in Colleges and Universities* by Ellen Sarkisian. Derek Bok Center for Teaching and Learning, Harvard University, 2006. ISBN: 0-674-02141-X.
- c. *First Day to Final Grade - A Graduate Student's Guide to Teaching (2nd edition)* by Anne Curzan and Lisa Damour. The University of Michigan Press. 2006. ISBN: 0-472-03188-0.

**Meeting the OSU policy on Responsible Conduct of Research (RCR).** Recently OSU has put in place a policy requiring all graduate students to complete training in the ethical and responsible conduct of research (RCR). The training involves completion of an on-line module. Those who are new Teaching Assistants in the Department of Mathematics will be expected to complete the RCR module during Math 5902. The OSU policy states that graduate students will not be allowed to enroll for the spring 2010 semester until they complete this training. For information about completing the module, go to

[http://gradcollege.okstate.edu/faculty/RCR\\_grad\\_students.htm](http://gradcollege.okstate.edu/faculty/RCR_grad_students.htm)

Once you have completed the module you should print the completion report and return it me; I will then forward it to one of the graduate coordinators.

**Course Evaluation.** Your course grade will be determined by your (1) attendance/enthusiastic participation in assigned practicum (40%); (2) completion and discussion of written assignments and seminar activities (40%); and, (3) enthusiastic participation in seminars and discussions (20%); each of these components is influenced by your ability to communicate in English (written and oral).

**Syllabus Attachment.** The URL for the OSU Syllabus Attachment for 2012 Fall semester is

<http://academicaffairs.okstate.edu/images/documents/sylatfa.pdf>

This website includes add/drop/withdrawal dates, university holidays, accommodations for students with disabilities, academic resources, and much more. You are responsible for reading this information now and having any questions answered.

**Drop and Withdrawal Policy.** "Dropping" means you are withdrawing from a specific course but you are still enrolled in at least one other OSU course; "Withdrawal" means you are dropping *all courses* you are and no longer enrolled for the current semester. Information related to the dates for "dropping" and "withdrawing" is available in the Fall 2012 Syllabus Attachment.

**Incomplete Grade.** The grade of "I" is given to students who satisfactorily completed the majority of the course work and whose work averages "D" or better, but who have been **unavoidably** prevented from completing the remaining work of the course.

**Academic Integrity.** The university has explicit rules governing academic integrity. Please consult the OSU Fall 2012 Syllabus Attachment mentioned above on the web. Working with another person or in study groups on problems can be helpful in learning the material. I encourage you to work together if you find it helpful. However, **all written work submitted must be your own.** Copying someone else's problem solution or showing your written solution to someone else are prohibited; such behaviors are regarded as violations of academic integrity and will be treated according to the University's policy. In order to be successful in learning the material and doing well on the examinations you must think very hard about the problems themselves **before** discussing them with anyone else.

**Special Accommodations for Students.** "If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services (315 Student Union). Please advise your instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified" (OSU Fall 2012 Syllabus Attachment).

**Office Hours.** I encourage you to come talk to me during my office hours (or email for an appointment if you can't make any of those times) when you have questions or concerns.

**Final Note. Any changes in this syllabus will be communicated to you by the instructor in class.**