

# Methods of Teaching Secondary Mathematics

SEU 323.010

Spring 2012 • Prof. Schaeffer

## COURSE DESCRIPTION

This course has been designed to give prospective teachers the methods, techniques, and evaluative instruments applicable to the teaching of secondary school mathematics. Each student is expected to prepare lesson plans and complete a variety of readings and other assignments, as well as participate in classroom discussions of the above activities.

## COURSE OBJECTIVES

By the conclusion of this course, the student will be able to:

- (a) plan effective daily lessons;
- (b) plan longer units;
- (c) use correct mathematical terminology and pronunciation;
- (d) explain topics in mathematics clearly and concisely;
- (e) select wisely and use effectively a variety of appropriate methods, including manipulatives, cooperative learning, modern technology (graphing calculators and computers, for example), bulletin boards, etc.;
- (f) lead one's students through a logical development of a mathematical topic;
- (g) think through mathematics as the average student does;
- (h) inspire one's students to appreciate the usefulness and beauty of mathematics in today's world;
- (i) become familiar with the profession; and
- (j) become a lifelong learner.

## TEXTBOOKS

*Teaching Secondary Mathematics, Eighth Ed.* and *Principles and Standards for School Mathematics*

## COVERAGE

Chapter 1: The Challenge of Teaching.

Chapter 2: Long-Range and Short-Range Planning.

Chapter 3: Teaching More Effective Lessons.

Chapter 5: Using Technology to Enhance Mathematics Instruction.

Chapter 6: Assessment.

(For a complete list of topics, go to my Web site and view the complete course syllabus.)

## ASSESSMENT

The course and subsequently the student's grade will comprise the following components (the percentage in parentheses signifies the portion of the final grade to be determined by that component):

**Written Assignments (25%)**, largely based on readings from the assigned texts.

**A Bulletin Board (10%)**.

**Two "Lessons" (20%)** taught to the rest of the class.

**Three Reviews (5%)** of articles from professional journals in the field.

**A Written Paper (10%)** on an appropriate, related topic of the student's choosing, chosen with the advice and consent of the instructor.

**A Mid-Term Exam (10%)**.

**A Final Exam (20%)**.

## **GRADING SYSTEM**

Based on points, each item weighted according to its significance. Precise cutoff scores for letter grades will be determined at the end of the semester, but will essentially follow the standard 60-70-80-90 model, according to the rubric below:

- 90-100% Exemplary Response**
- 80-89% Competent Response**
- 70-79% Minor Flaws But Satisfactory**
- 60-69% Serious Flaws But Nearly Satisfactory**
- 50-59% Begins, But Fails to Complete Assignment**
- 0-49% Unable to Begin Effectively**

## **ATTENDANCE**

As in all university classes, your attendance is expected. Activities have been planned for which your attendance is necessary. In short: You miss, you lose! You will be permitted to make up missed work only for those absences for which you have University-approved written excuses.

## **CONTACT INFORMATION**

Office: Lytle 262; Phone: 610-683-4419 (Office) 610-373-3333 (Home)  
e-mail: [schaeffe@kutztown.edu](mailto:schaeffe@kutztown.edu)  
Web site: <http://faculty.kutztown.edu/schaeffe>

## **OFFICE HOURS**

Tu 5:00–6:00; W 4:00–5:30; Th 3:00–5:30 (also other times by appointment)

## **ACADEMIC DISHONESTY**

At a minimum, you will receive a “0” on the applicable graded activity. Additionally, the instructor reserves the right to invoke the sanctions set forth in the Academic Dishonesty Policy (as printed in *The Key*).

## **ACCOMMODATIONS**

If you have already disclosed a disability to the Disability Services Office (215 Stratton Administration Building) and are seeking accommodations, please feel free to speak with me privately so that I may assist you. If you have an injury sustained during military service including PTSD or TBI, you are also eligible for accommodations under the ADA and should contact the Disability Services Office.