CENTRAL CONNECTICUT STATE UNIVERSITY
Department of Mathematical Sciences

Math 547 Reflective Practice in Teaching Mathematics

Fall Semester 2010 – Independent Study

I. Description: Designed to help in-service teachers develop as reflective practitioners through the use of lesson logs, narrative commentary, analysis of video-recorded lessons, and examination of student work. Emphasis on relating instruction to major concepts of mathematics and their connections, selecting and implementing engaging tasks, designing appropriate assessments and determining meaningful feedback for students. This course is particularly helpful to teachers who are completing the requirements of The Teacher Education and Mentoring (TEAM) Program. Open only to certified in-service teachers of mathematics, grades 7-12.

II. Course Details:

Professor:	Dr. Shelly M. Jones
Class Meetings:	Selected Mondays (Dates given below in course schedule) Maria Sanford, Room 216
Phone:	Office 832-2857
E-Mail:	jonessem@ccsu.edu
Office:	Marcus White Room 114
Office Hours:	Monday 1 – 2pm Wednesday noon – 3pm Thursday 1 – 2 pm Other times by appointment

III. Textbooks: Implementing Standards-Based mathematics Instruction: A Casebook for Professional Development by m. Stein, M. Smith, M. Henningsen, and E. Silver, Teachers College Press 2000.

Other Recommended Books:
Principles and Standards for School Mathematics, National Council of Teachers of Mathematics 2000. Available in part on the web at http://standards.nctm.org/document/index.htm.

IV. Recommended Websites: NCTM: www.nctm.org

TEAM Program: www.ctteam.org

ATOMIC: www.atomic.necaiweb.com

CSDE: www.ctcurriculum.org

V. Prerequisite: Secondary Mathematics Certification

VI. Students for Whom Course Is Intended:

This course is open only to in-service teachers of mathematics, grades 7-12. Assignments will be based on teachers' classroom practice.

VII. Basic Goals: to help in-service teachers develop as reflective practitioners. Emphasis will be given to relating instruction to major concepts of mathematics and their connections, selecting and implementing engaging tasks, designing appropriate assessments and determining meaningful feedback to give to students. This course will be particularly helpful to teachers who are completing modules for the TEAM Program.

University Policies:

Please contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, room 241, Copernicus Hall if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty.

In the event of a weather emergency that requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call 832-3333 for the "general snow message."

IX. Evaluation: Based on **timely** and thorough completion of assignments, quality of final drafts, and class participation (&attendance). Categories of evaluation will include but are not limited to: Lesson plans and reflections, TEAM assignments, mini-lesson presentation in class, case reflections, TEAM Modules.

X. Topics Considered: Please note that this is a **tentative schedule** subject to adjustment during the term.

Date	**Topic of the Evening**	**Homework Assignment**
Aug. 30	Overview of Course Overview of TEAM Discuss Reflective Practices Research Assignment	Read *Implementing Standards-Based Mathematics Instruction*, Preface, Introduction, Chapters 1 & 2; Study especially Task Analysis Guide, p. 16, Fig. 1.4, p. 21, and Fig. 2.1, p. 27; 1) **One-Day Lesson Plan:** Prepare a lesson plan of a concept you will teach to your students within the next two weeks. The lesson plan is **due on the day of class (9/13).** Bring two copies (one to hand in and one to record notes on). We will discuss Level of Cognitive Demand. In addition, turn in a ½ - page reflection about the level of cognitive demand represented in your lesson.
Sept. 13	Discuss the Mathematical Task Framework: Levels of Cognitive Demand using the text readings and your one-page lessons Discuss Learning from Cases Using Reflection as a Tool Plan TEAM Module	Read Chapters 3 – 5 **Reflection of Cases Assignment 1:** The Case of Ron Castleman: Analyze Ron's teaching and his reflections for both of his classes. In a 2-page analysis, address the questions on p. 56. **(Due 9/27)**

Sept. 27	Discuss the Case of Ron Discuss TEAM Modules Lesson Plans – How to write and use lesson plans, State and National Standards	**Level of Cognitive Demand (LOCD) Assignment:** 1) Select one of your classes. Write and hand in a unit lesson plan (5-8 lessons) for that class and analyze the plans based on the kinds of tasks assigned and the level of cognitive demand. The lesson plans and a description of the levels of cognitive demand are **due 10/25.** 2) Choose one of the lessons. Be ready to teach a shortened version of the lesson on **11/8**. Write a one-page reflection on teaching the lesson with your students. Read Chapter 6, The Case of Fran Gorman and Kevin Cooper. **Reflection of Cases Assignment 2**: In a **2-page analysis**, evaluate the tasks assigned in Ch. 6, the implementation (considering the questions on p. 76) and **compare** the ways in which Fran's and Kevin's teaching experiences are different/similar to yours. **(Due 10/25)**
Oct. 11	No Class – Conduct Research	Read Chapter 7 **Reflection of Cases Assignment 3:** In a **2-page essay compare** Trina and Ursula's classes addressing the questions on pp. 90-91. **(Due on the day of class 11/8)** Read Chapter 8: The Case of Monique. Be ready to discuss in next class on 11/8. (no written assignment) Read Chapter 10: The Case of Jerome Be ready to discuss in next class on 11/8. (no written assignment)
Oct. 25 Midterm (Last day to Withdraw with W, without permission)	Discuss: The Case of Fran and Kevin Discuss TEAM Modules	
Nov. 8	Discuss Cases: 1) Trina and Ursula 2) Monique 3) Jerome Teach Mini Lessons	

Nov. 22	No Class – Conduct Research	Prepare presentations Write research articles
Final Exam Day (Dec. 13)	Research Presentations TEAM Module Presentations Share experience of completing TEAM Modules.	Due: TEAM Modules in addition a one-page reflection about the challenges, frustrations, disappointments, and what you've learned about the TEAM Modules experience.