

# STUDENT COURSE SYLLABUS

## SCED 598: Qualitative Research in Science and Mathematics Education

Fall, 2006

3 semester hours



**Prerequisites:** Consent of the instructor

**Instructor:** Dr. Murat Kahveci, Office YD 606

**Meeting Time:** TTT 678

**Office Hours:** By appointment

**Daytime Phone:** 359-7371

**e-mail:** Murat.Kahveci@boun.edu.tr

### Course Website

<http://kahveci.boun.edu.tr>

Please note that this is a hybrid class, part situated at the university and the course website. Students are required to log into the website after each class to gather assignments and submission procedures. It is also helpful in this class to check your email account on a regular basis. You will need to register yourself for this class with an active email address, preferably your *xxx@boun.edu.tr* address. When you obtain your username and password, you should log in to the course web site and click the link SCED 598. The system will ask you the enrollment key, which is **fall2006sced598**.

*This syllabus is subject to change on the basis of the needs.*

### Course Overview

SCED 598 is meant to provide students with theoretical and conceptual approaches in conducting a qualitative research, particularly in educational settings concentrated on science and/or mathematics education. While the theoretical underpinnings of qualitative research are the focus of the course, the issues being researched will be related to those educational areas in practice. The scope of the class includes traditions of qualitative research, theoretical underpinnings, research design, fieldwork, qualitative data collection and analysis, writing the findings up, and discussions on applied qualitative research for education.

### Course Goals

Students will:

- demonstrate an understanding of basic principles and purposes of qualitative research.
- demonstrate an ability to construct effective qualitative data (e.g., field notes, interview transcripts).
- demonstrate an ability to analyze and interpret qualitative data.
- be able to conduct a field study that includes data collection, analysis, and reporting of findings in a presentation and in an academic writing.
- be able to evaluate and critique research reports and publications.
- demonstrate an ability to integrate existing literature into research projects.
- demonstrate knowledge of ethical and unethical practices in qualitative research.

### Course Expectations and Assignments

This is not a lecture class and information cannot be simply obtained by “getting the notes” from a classmate. You are to read the assignments before coming to class and be ready for discussion. Every class discussion will be lead by one student who will be announced at the course web site. Therefore, attendance is expected and you are to be professional in your class participation. Professionalism includes, but is not limited to, such things as excellence in class assignments, constructive class participation, being a positive contributor to group work, taking advantage of opportunities to broaden personal knowledge and skills, and going beyond the minimum in all your work and interactions.

There are several kinds of required products in this course.

**Weekly reviews (40%):** You will need to submit “critical review”, “peer-reflection”, and “self-reflection” on weekly basis. The purpose of the critical review is to give the student and opportunity to read and critically think about the assigned texts. Successful completion of the critical review will include both a clear summary of the arguments and the student’s evaluation.

The peer-reflection requires you of reading your peer's critical review and react to it. In addition, by the peer-reflection due, the topic is discussed in the classroom; all peer-reflections must incorporate classroom discussions. The self-reflection includes your peer's reflection and your critical ideas.

**Individual research (40%):** Throughout the semester, every student develops a qualitative research. That includes site visits, observations, interview protocols, data analysis, and a written report.

## Required Texts

Bogdan, R. C. & Biklen, S. K. (1998). *Qualitative Research for Education*. Boston: Allyn & Bacon.

## Participation & Professionalism

**Attendance (20%)**- Class sessions are predominantly interactive with a heavy emphasis upon collaborative efforts. As a consequence, in-class activities for which points are assigned cannot be "made up" outside of class.

**Participation**- Active participation includes, but is not limited to, attending to seminar/presentation content, communicating and offering suggestions, feedback and/or analysis during discussions. Obviously, if you do not attend class, you cannot participate. For those students who rely upon external incentives to accomplish the participation goals, the following policy is in effect. For the student missing more than 45 minutes of a class, 2% points will be deducted from the total grade for each occurrence. Habitually coming to class more than 10 minutes late will result in a 1% penalty for each occurrence. Missing class will result in a 5 percentage points deducted from the total, but missing more than three class sessions will require that you meet with me to discussed continued enrollment in the class.

**Professionalism**- A specific, though not inclusive, list of behaviors that addresses professionalism includes: completing assignments in a timely fashion, displaying evolving attitudes toward teaching and learning, developing assignments that are of high quality, demonstrating and openness to suggestions, seeking advice when needed, and sharing ideas with others.

## Assessment of Work

When completing written assignments, remember that your audience will be colleagues and the instructor from the course. Written work should demonstrate your interests, experiences from your teaching, and ideas from current educational literature. Although you have considerable freedom in your presentation choices, your writing should always be reflective and professional. Reflective and professional writing should include an objective and a constructive discussion of the topic. Try to avoid simply listing events and experiences. That is, attend to the degree to which you are pushing your thinking. By moving beyond simple description of your experiences, your interpretations and attempts to understand issues will likely reach beyond surface discussions.

## Written Assignment Performance Standards

Grade Weights for all written assignments are determined using the following criteria:

70%=Content (See rubric below)

20%= Grammar-Ability to communicate, and

10%=On time.

**7-** Fully achieves the purpose of the task. Insightfully interprets, extends beyond task, raises provocative questions.

Demonstrates an in-depth understanding of concepts and content. Communicates effectively and clearly.

**6-** Accomplishes the purposes of the task; shows a clear understanding of concepts. Communicates effectively.

**5-** Substantially completes the purpose of the task. Displays understanding of major concepts, even though some less important ideas may be missing. Generally communicates successfully.

**4-** Purposes of the task are not fully achieved; needs elaboration; some concepts may be ineffectually stated or inappropriate. Assumptions may be flawed. Gaps in conceptual understanding; unclear

**3-** Important purposes of the task are not achieved; work may need to be redirected.

**2-** Purposes of the task are not accomplished; little evidence of appropriate reasoning.

## Grading

The grading scale used for the determination of final grades will be based on a standard university grading scale. Plus and minus grades will be used in borderline cases only.

## Tentative Schedule

### 26 September - 2 October

- Meeting
- Overview of course syllabus; instructor's vision, expectations and classroom norms, assignments and grading criteria, and course web site resources
- No reading due on the first class

### 3 October - 9 October

- Chapter 1, Foundations of qualitative research in education
- Chapter 1, "Critical review" due by 2 October, at 23:00
- Individual Research. Deciding a site to research, speak with the instructor

### 10 October - 16 October

- Chapter 1, "Peer-review" and "self-reflection" due by 9 October, at 23:00
- Chapter 2, Research design
- Chapter 2, "Critical review" due by 9 October, at 23:00
- Individual Research. Stating the site visits. Data collections: taking field notes and deciding next steps, discussing your observations in classroom

### 17 October - 23 October

- Chapter 2, "Peer-review" and "self-reflection" due by 16 October, at 23:00
- Chapter 3, Fieldwork
- Chapter 3, "Critical review" due by 16 October, at 23:00
- Research proposal: "Site description, research questions, and research design" due 16 October, at 23:00
- Individual Research. Data collections: taking field notes and deciding next steps, discussing your observations in classroom

### 24 October - 30 October

- Holiday

### 31 October - 6 November

- Chapter 3, "Peer-review" and "self-reflection" due by 30 October, at 23:00
- Chapter 4, Qualitative data
- Chapter 4, "Critical review" due by 30 October, at 23:00

- Individual Research. Data collections: taking field notes and deciding next steps, discussing your observations in classroom

### 7 November - 13 November

- Chapter 4, "Peer-review" and "self-reflection" due by 6 November, at 23:00
- Chapter 5, Data analysis
- Chapter 5, "Critical review" due by 6 November, at 23:00
- Individual Research. Data collections: taking field notes and deciding next steps, discussing your observations in classroom.

### 14 November - 20 November

- Chapter 5, "Peer-review" and "self-reflection" due by 13 November, at 23:00
- Chapter 6, Writing it up
- Chapter 6, "Critical review" due by 13 November, at 23:00
- Individual Research. Data collection and analysis

### 21 November - 27 November

- Chapter 6, "Peer-review" and "self-reflection" due by 20 November, at 23:00
- Chapter 7, Applied qualitative research for education
- Chapter 7, "Critical review" due by 20 November, at 23:00
- Individual Research. Data collection, analysis, and writing it up

### 28 November - 4 December

- Individual research presentations

### 5 December - 11 December

- Individual research presentations

### 12 December - 18 December

- Individual research presentations
- Submission of individual research reports by 11 December, 23:00

### 19 December - 25 December

- Individual research presentations

### 26 December

- No class