

EDUC 2460 L STEM
Middle School
Educational Experiences in Classroom and Community
3 Credits---Spring 2009

**"Everyone can be great because anyone can serve."
-Martin Luther King, Jr.**

Instructor: Marianne Causey, EdS

Seminars and Service:

Monday 1:30 – 3:30 Seminar

Monday 3:45- 5:45 Service and Learning

Wednesday 3:45 – 5:45 Service and Learning

Service: 4 hours per week for 13 weeks – Hilsman Middle School
50 hours of service

Catalogue Description

Supervised exposure to and experiences in P-12 school and community-based educational settings. Includes observation, discussion, reading and tutoring/teaching, with an emphasis on science/math and cultural/linguistic diversity. Especially designed for students majoring in the sciences who may, at some point, consider the field of education. This course has a required field experience component.

Course Description

EDUC 2460L is a supervised introduction to P-12 education with a service learning and STEM emphasis. In addition to a weekly seminar, students will actively participate in service projects within local schools, working with teachers and middle school students through tutoring, science/math project collaboration, and after school academic extension activities in math and science.

Weekly in-school seminars will revolve around school experiences and relevant readings. In addition, seminars will involve discussions with district teachers, administrators, and other personnel, as well as UGA faculty and staff on topics including current trends in math/ science, cultural and linguistic diversity, literacy, tutoring, and life in schools.

Depending on intended program of study, the service hours completed in this course MAY be applied toward students' required pre-professional experience.

Rationale and Objectives

The National and Community Service Act of 1990 defines service learning with a set of four criteria:

1. Under which students learn and develop through participation in thoughtfully organized service experiences that meet actual community needs and that are coordinated in collaboration with the school and community;
2. That is integrated into the students' academic curriculum or provides structured time for a student to think, talk, or write about what the student did and saw during the actual service activity;
3. That provides students with opportunities to use newly acquired skills and knowledge in real-life situations in their own communities; and
4. That enhances what is taught in school by extending student learning beyond the classroom and into the community and helps to foster the development of a sense of caring for others.

Service learning brings students into the life and needs of the community that surrounds UGA and also brings those community needs into the life of the college curriculum. STEM service learning can serve to bridge the gaps between STEM instruction (science/technology/engineering/math), UGA, and the surrounding community. The National Science Education Standards are premised on a conviction that all students deserve and must have the opportunity to become scientifically literate (Clausner and Alberts, 1996). In this course, students are placed in local public schools to provide students with unique, engaging science/math learning opportunities. Through hands-on experience, careful guidance, and using prior knowledge of applied science and math, UGA students help middle school students make better sense of math and science content.

Through direct lab experiences in Middle School educational settings, students will:

1. Develop awareness and understanding of:
 - a. the needs and abilities of today's diverse student population
 - b. the roles and responsibilities of STEM faculty
 - c. classroom organization and structure
 - d. the organization and structure of educational programs (including, but not limited to, schools)
 - e. the community context in which educational programs function and the relationship between communities and educational programs
 - f. state and federal policies and their impact on educational practice
2. Construct, develop and compile:
 - a. science/math experiences and science/math supplemental instruction for students in grades 5-8
 - b. relevant hands-on science/math projects to extend classroom STEM instruction

- c. useful, comprehensive, interactive resources for STEM-related projects.
3. Reflect on these experiences and relate them to:
 - a. current issues in the education of culturally and linguistically diverse learners in Georgia
 - b. current attempts to reform public education with particular reference to the Organization of schools, STEM curriculum, assessment and instructional practices
4. Increase their ability to engage in moral reasoning. Specifically students will:
 - a. Recognize the community and the greater common good in addition to individual needs and goals
 - b. Contribute to the eradication of stereotypes and prejudices that exist in society
 - c. Judge and understand ethical behavior in social applications

Required Readings

All journal articles, assigned chapters and other readings will be posted on WebCT.

Course Expectations and Requirements

1. **Attendance:** You are expected to attend all weekly seminars and spend a minimum of 50 hours doing service work in a school. If you are unable to attend a seminar you should contact your instructor prior to the beginning of class. You should then make arrangements to make up any work you have missed. If you are unable to go to the school at your scheduled time, you must contact your instructor. Also, you will need to make up missed service hours so that your total number of hours is at least 50.
2. **Professionalism:** You are expected to behave professionally and ethically in all situations and contexts.
3. **Assignments:**
 - ◆ **Ten weekly response and reflection papers (40 points).** You will be asked to write papers responding to the assigned readings for the week and/or reflecting on your experiences at the school during the previous week. Each paper should be typed and be between 350 and 500 words in length. Papers are due at the beginning of each class. There will be assigned readings for 11 classes and you should write a paper for 10 of these 11 classes. Each paper will be worth 4 points for a total of 40 points.
 - ◆ **Service in the schools: (50 points)**

Rating Scale:

Professional Effort**10 Possible Points**

- Arrived on time at scheduled times
- Dressed appropriately
- Followed school policies and procedures

Preparation**10 Possible Points**

- Prepared materials for school students as needed
- Organized appropriately for each class
- Had materials ready if activity called for specific materials.

Assisted Learning**15 Possible Points**

- Promoted learning of science/math skills through inquiry
- Asked students open-ended questions and encouraged them to ask questions

Interaction with children**15 Possible Points**

- Communicated in positive, encouraging, respectful manner with students
- Responsive to student questions

Final Paper (10 points) : Your final paper will include reflections and integration from your choice of two auxiliary articles posted for the course.

- ◆ Relating your readings from theory and practice, you will document your experience with the students with whom you worked.
- ◆ Share what resources you found that proved useful.
- ◆ Discuss what you learned from this service learning experience.
- ◆ Based on your interactions and observations, include your perceptions of what the students learned.

Attendance/Absences: You are committing yourselves to work with adolescents. They count on you and will not understand it if you do not show up. Attendance is critical for this class.

1-2 absences: No negative effect on grade in course. Plan to make up your hours.

3 absences: Final grade is lowered 7 points.

4 absences: Final grade is lowered 14 points. etc.

Arriving 20 or more minutes late to class without prior approval counts as an absence.

Grading Scale

The following scale will be used for grading:

A	93 – 100
A-	90 – 92
B+	87 – 89
B	83 – 86

B-	80 – 82
C+	77 – 79
C	73 – 76
C-	70 – 72
D+	67 – 69
D	63 – 66
D-	60 – 62
F	59 or lower