EDU 41x Field Experiences in Mathematics – Fall 2011

Instructor  Scott Koch  Phone  585.704.8329
E-mail  scottjkoch@gmail.com

Meeting Times  Mondays, off campus  3:15 to 4:15

Required Text:

Description:
This course meets in conjunction with the students' field experiences in local middle and high school classrooms.

Goals: to help pre-service teachers reflect on
1. the pedagogical and mathematical issues raised in their observations of teachers and students;
2. their interactions with students
3. their obligations and responsibilities as educators; and
4. their own strengths and weaknesses as novice educators.

More specifically, the course aims at enabling students to:
1. become systematic in the reflection of their practice and observation of students;
2. access resources at the school, district, university and national levels to facilitate their planning and teaching; and
3. become aware of the diversity of learners and learning environments.

Philosophy Informing the Course:

This seminar is intended to focus students on their experiences as observers and occasionally as instructors in local mathematics classrooms. The goal is to provide an experience that allows for observations in a variety of classrooms as well as for a more focused stay in one classroom. Consequently, each student is expected to visit not only their cooperating teacher’s but other math classes in their assigned buildings as opportunities allow.

Students are expected to use the Warner School theoretical framework and methods course readings to guide their observations and conduct in the classroom. The principles and proficiencies that will be stressed by the seminar instructor and university supervisors are given below. These principles and proficiencies reflect an emphasis on constructivist learning principles and on embracing diversity as a resource.
Course Requirements:

Class Participation

Students must attend each class and participate in the discussions.

Class Journal

Students must write weekly journals, on topics determined by the instructor and university supervisors.

Lesson Plans

At least four times during the course, students will turn in a lesson plan that has been constructed with, evaluated and signed by the Cooperating Teacher. After the lesson plan has been enacted, a reflection on the strengths and weaknesses of the lesson will be turned in to the instructor.

Satisfactory field placement evaluations

Students must satisfactorily complete their field placements. The requirements for the field placement are indicated in the Student Teaching Handbook and the Letter of Expectations to which the student teacher and cooperating teacher agree. The template for the Letter of Expectations will be provided by the university instructor and will serve as an outline of the requirements necessary for a satisfactory field placement.

Standards addressed in this course

1.1. Candidates are familiar with the principles and concepts delineated in professional, New York State, and Warner Teaching and Curriculum standards, and their implications for curricular and instructional decisions. (K)

1.2. Candidates are able to create learning experiences that make the subject matter meaningful and relevant for all students. (S)

2.3 Candidates are able to provide learning experiences that take into consideration the students’ developmental level and draw on the strengths and resources available in students’ prior experiences, as well as the school, family, and community contexts in which they live. (S)

3.2 Candidates are committed to high moral and ethical standards and respect and value their students’ differences in contexts and approaches to learning. (D)

3.3 Candidates are familiar with some of the cultural, linguistic and learning differences and disabilities their students may present and their implications for the classroom. (K)

4.1. Candidates are familiar with a wide array of instructional strategies consistent with professional, NYS and WS program standards, and understand their potential uses, values and limitations for achieving specific learning goals. (K)
5.1. Candidates understand what may encourage or hinder student’s motivation and engagement in learning, based on an analysis of research and practice. (K)

7.2 Candidates are able to implement lessons according to a well-defined and high quality plan. (S)

**Evaluation:**
Final evaluations will be based on the evaluation of the seminar instructor with regard to growth demonstrated in:
- the field placement;
- construction and enactment of lesson plans; and
- journals and reflections.
Course Schedule:
Enter week, topic for the week, and required reading in the appropriate columns below. Use the
Tab key to move around in the table. To insert rows, click on the table and then on the Table menu,
point to Insert and click on the Row action you want to take. To delete rows, click on the table and
then on the Table menu, point to Delete and click on Rows.

<table>
<thead>
<tr>
<th>Week</th>
<th>Notes</th>
<th>Required Reading</th>
</tr>
</thead>
</table>
| Sep 12 | Letters of expectations                    | Lemov Chpt 5
Focus in HS Math – President’s letter and Section 1                                |
| Sep 19 | Classroom culture and management            | Lemov Chpt 6
Focus in HS Math Section 2 Chpt’s 3 and 4                                         |
| Sep 26 | Lesson plan quality and student engagement | Lemov Chpt 4
Focus in HS Math Section 2 Chpt’s 5 and 6                                         |
| Oct 3  | Planning for achievement                   | Lemov Chpt 2
Focus in HS Math Section 2 Chpt’s 7 and 8                                         |
| Oct 10 | [Columbus Day Holiday]
The hook and how to monitor learning | Lemov Chpt 3
Focus in HS Math Section 2 Chpt 9 and pages 107-110                                |
| Oct 17 | Class participation                        | Lemov Chpt 1
Laprarie – Serving Students with Special Needs
Translating Research Chpt’s 1, 2                                                   |
| Oct 24 | Accentuate the positive                   | Lemov Chpt 7
Ed Week – Emotional Resilience
Translating Research Chpt’s 3, 4                                                    |
| Oct 31 | Pacing                                     | Lemov Chpt 8
Webel – Shifting Mathematical Authority
Translating Research Chpt’s 8, 9                                                    |
| Nov 7  | Questioning and Responses
Look at CCSSM                               | Lemov Chpt 9
Common Core MIH pages vii to 17                                                    |
| Nov 14 | Reading and formative assessment           | Lemov Chpt 10
Translating Research Chpt’s 10, 11                                                  |
| Nov 21 | Focus on equity                            | Translating Research Chpt 12                                                     |
| Nov 28 |                                            | TBD                                                                              |

Note:
Additional readings will be added as determined by the instructor.