



## AEDS 450P Practicum in Teaching Mathematics in the Secondary School Fall 2008

<b>Instructor:</b> Bridget Coleman, Ph.D.	<b>Meeting Times</b>	W 11:40 a.m. – 12:40 p.m. *
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<b>Telephone:</b> 641-3792 (Office)	<b>Office:</b>	B&E 208
641-2760 (J.D. Lever Elem.)	<b>Office Hours:</b>	T 9:00 – 12:00 (B&E),
641-4763 (Home)		W/Th 1:00 – 2:30 (JDLE) & by appointment

**Mission Statement:** *The USCA School of education, in partnership with the university community, regional schools, area professionals and businesses, prepares dynamic educators who are knowledgeable in their fields, skilled in the art and science of teaching, and dedicated to providing the quality education that every student deserves.*

### I. Descriptive Information

- A. AEDS 450P. Practicum in Teaching Mathematics in the Secondary School
- B. Catalog Description. (1) Supervised clinical experience in a middle and high school mathematics classroom. Observations and participation in a classroom setting are required with a focus on math learning experiences, materials and equipment. Seminars and group discussion included.
- C. Intended Audience: (Prereq: Admission to Education Professional Program or special permission of School Head; Coreq: AEDS 450) This course is intended for students who have been admitted to the Professional Program in Education and who are seeking certification in mathematics.
- D. USCA School of Education Conceptual Framework  
The objectives of this course are designed to facilitate the candidate's development as a Dynamic Educator. This course will focus specifically on the development of the Dynamic Educator with respect to planning, instructing, communicating, growing professionally, and managing secondary mathematics classes.

### II. Course Goals and Objectives

#### A. General Goals

The goal of the course is to provide directed, clinical observations in a secondary mathematics classroom that allows the student to study and reflect upon the secondary mathematics curriculum and the environment in which it is developed and implemented. This practicum builds upon the experiences in the prerequisite course, AEDC 310, by providing students an opportunity to become more actively involved in classroom instruction through assisting the classroom teacher and teaching two lessons.

#### B. Instructional Objectives

The objectives of this course are designed to facilitate the candidate's development as a Dynamic Educator. This course will focus specifically on the Dynamic Educator as planner, instructor, communicator, and professional.

The student will:

- 1. Critique and reflect upon instruction observed in a typical secondary mathematics classroom.
- 2. Characterize the secondary mathematics classroom and associated teacher behaviors with regard to interactions between the following: curriculum, classroom management and discipline, teaching strategies, and non-instructional activities.
- 3. Implement the state curriculum standards in the planning and presentation of mathematics lessons to middle and high school students.

### III. Course Readings:

#### A. Required Texts

USCA ADEPT Manual (online), <http://www.usca.edu/education/> ⇒ Current Students ⇒  
Handbooks/Manuals ⇒ ADEPT Handbook  
<http://www.usca.edu/education/PDF/Handbooks/ADEPT%20Standards.pdf>

USCA School of Education Practica Handbook

NCTM Principals and Standards for School Mathematics (online), [www.nctm.org](http://www.nctm.org)

South Carolina Mathematics Curriculum Standards 2007. [On-line] Available:  
<http://ed.sc.gov/agency/offices/cso/standards/math/documents/2007MathematicsStandards.doc>

USCA Name Badge

B. Optional Texts

None

C. Supplemental Readings

Other readings will be provided in class for group discussion and related assignments.

#### IV. Instructional Procedures

A variety of instructional approaches will be utilized, but the basis for instruction is direct observation and participation in an assigned clinical setting. Specific methods used will include discussion, observation and reflection, journal writing, written papers, lesson design, implementation and analysis.

#### V. Course Requirements

##### A. Administrative Requirements

1. Verification of Field Experience: This course requires a minimum of 40 hours of field experience. To receive credit in the course, all **40 hours must be completed and documented**. The instructor will provide a time sheet for each student. At the end of each observation period, the student is to record the date and time of the visit as well as the nature of the activities during the visit. Both the student and the cooperating teacher must sign the time sheet to verify each classroom visit. A "backup" copy of the time sheet is recommended. The time sheet must be turned in to receive credit in this course.
2. Attendance Policy: As a part of your professional development, class attendance is essential and punctuality is expected. You are responsible for material covered in class during any absence and for checking with the instructor of classmates about any changes in scheduling or assignments that may have been made. If you anticipate an absence, notify the instructor in advance of the absence. Excessive absences/tardies may affect the final average. Candidates must attend their assigned classroom a minimum of 1 hour each week of the semester.
3. Honor Code: Plagiarism is prohibited. Please review the sections of the USCA Academic Code of Conduct on plagiarism. For additional information regarding plagiarism, consult the *Publication Manual of the American Psychological Association*.  
The following statement is to be included on the first page of every major assignment:  
*On my honor as a University of South Carolina Aiken student, I have completed my work according to the principle of Academic Integrity. I have neither given nor received any unauthorized aid on the assignment/examination.*  
Signature \_\_\_\_\_ Date \_\_\_\_\_
4. USCA Code of Conduct: Candidates will conduct themselves in class in accordance with the standards noted in the USCA Student Handbook. Given that this course is required in preparation for becoming a teacher, candidates should exhibit those behaviors expected of professionals.
  - ❖ Cell phones and pagers should be on a non-audio mode during class.
  - ❖ Please do not bring children or guests to class unless the professor has given prior permission.
  - ❖ Do not submit full or partial assignments from other classes for requirements in this course.
5. Students with Disabilities: If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A BSED, (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.
6. Assignments: All assignments are expected by 4:30 p.m. on due dates. If you will be absent the day an assignment is due, make arrangements to turn it in on time. All major assignments must be typed. Computers are available on campus for your convenience.
7. Student Email: Announcements and assignments will be sent through the USCA email system on a regular basis. It is important that candidates check their USCA email account on a daily basis and send any assignments for class through this account. You should contact CSD (<http://www.usca.edu/helpdesk/studentemail>) for information on setting up and using your account.

## B. Required Activities

### ▪ **Classroom Observations**

Candidates are required to participate in a **minimum of 40 hours of field experience** to receive credit for the course. *Once approved by the university and school district, at least one visit a week must be made to the assigned classroom. In addition to observing in the assigned classroom, one visit should be made to a different secondary classroom and one visit should be made to a local school's robotics team meeting.* The purpose for the visits is to receive as much information and observe as many different settings as possible. For this course, observations must be during mathematics instruction.

All 40 hours must be completed and documented before the final conference. The instructor will provide a time sheet for each candidate. At the end of each observation period the student is to record the date, starting time, finishing time, and total time of the visit. Both the student and the cooperating teacher must sign the time sheet to verify each classroom visit. A "backup" copy of the time sheet is recommended. An accurate time sheet (with appropriate signatures) must be turned in at the final conference.

Purchase an official personalized USCA name badge at the university bookstore. (Use this for all of your practica courses.) Wear the name badge on each visit to the school. Schools require that candidates sign in at the office before accessing the campus.

Professional attire is always expected (no jeans, t-shirts, flip flops, etc.). *You should dress more like the teacher than the students.*

During each visit, in addition to observing, assist the teacher when appropriate and especially when requested. All activities should take place within the classroom under the direct supervision of the teacher. Examples of assistance which you might provide are working with individuals or small groups, completing seatwork or hands-on activities, grading quizzes, tutoring students who need additional help, or participating in class discussions where appropriate. Under NO circumstances should you be left alone in the classroom with students.

### ▪ **Observation Log**

**Document all observations in a journal.** During or immediately following each visit, record notes describing in reasonable detail the math content, activities, events, and behaviors of both the teacher and the students. At the end of each set of observations, you should record reflections about the observations and activities. Each journal entry should include the date, time of observation, subject, grade/level, number of students, and the general topic of the lesson. Avoid the use of teacher and/or student names. The focus of the journal entries should be the mathematics instruction, not only general teaching strategies. (See guidelines in Practica Handbook.)

### ▪ **Videotaped Lesson Analysis**

- 1) Prepare a lesson plan in the 6-E's format that is appropriate for the assigned class. Have the lesson approved by the cooperating teacher and the university instructor at least one week before its presentation. Revise the lesson plan based on feedback from the instructors. Have the cooperating teacher sign the revised lesson plan.
- 2) Videotape the lesson as you present it to the assigned class. (Student permission forms must be on file before the taping of the lesson.)
- 3) The cooperating teacher will complete an evaluation of your presentation.
- 4) Complete an ADEPT criteria checklist for your lesson.
- 5) Write a reflection paper on the various phases of the lesson (e.g. planning, presenting, student involvement, videotaping, the ADEPT evaluation). Reference artifacts 1 – 4 in your reflection and submit them with your paper.

▪ **Activity-based Lesson**

- 1) Prepare an activity-based lesson plan appropriate for the assigned class. Have the lesson approved by the cooperating teacher and the university instructor at least one week before its presentation. Revise the lesson plan based on feedback from the instructors. Have the cooperating teacher sign and date the revised lesson plan.
- 2) Arrange a date for the university supervisor to observe your lesson and complete an ADEPT evaluation of your presentation. On the day of the lesson, provide the supervisor with a copy of the lesson plan and a blank copy of the evaluation form.
- 3) Complete an ADEPT criteria checklist for your lesson.
- 4) Write a reflection paper on the various phases of the lesson (e.g. planning, presenting, student involvement, the ADEPT evaluation). Reference artifacts 1 – 4 in your reflection and submit them with your paper.

NOTE: Professional behavior and dress are expected at all times. Keep the following suggestions in mind:

- ➔ You are a guest in the classroom of your cooperating teacher. Visits should be arranged with the teacher in advance. Do not drop in unannounced. Be on time and seated in a prearranged place in the room prior to the beginning of class. Notify the teacher if you will miss a scheduled observation.
- ➔ Your time sheet is a legal document and can be audited for accuracy. It is your responsibility to return the sheet to the university instructor at the end of the semester.
- ➔ The nature of your interactions with the cooperating teacher, the students, the other staff and faculty at your host school, and the university instructor are components of your professionalism. Your behavior should be above reproach.
- ➔ Your observations should not be discussed with persons outside of the context of this course. Even within the context of class discussions, avoid comments which would result in the identification of particular teachers or students.

**VI. Evaluation and Grading Scale**

Grading in this course will be determined by student performance in the following areas:

Class Attendance / Participation / Professionalism (Name Badge, Attendance at Initial Meeting, Signed Time Sheet / Documentation)	15 %
Weekly Classroom Observations / Log 40 Observation Hours and 40 Logs	40 %
Video-taped Lesson and Analysis	25 %
Activity-based Lesson and Analysis	20%

**Grading Scale**

93 - 100%	A
90 - 92%	B+
87 - 89%	B
82 - 86%	C+
78 - 81%	C
74 - 77%	D+
70 – 73%	D
Below 70	F

**ADEPT Performance Dimensions**

PD1: Long Range Planning	PD6: Providing Content for Learners
PD2: Short-range Planning of Instruction	PD7: Monitoring & Enhancing Learning
PD3: Short-range Planning, Development, & Use of Assessments	PD8: Maintaining Environment that Promotes Learning
PD4: Establishing & Maintaining High Expectations for Learners	PD9: Managing the Classroom
PD5: Using Instructional Strategies to Facilitate Learning	PD10: Fulfilling Professional Responsibilities Beyond Classroom

## VII. Course Schedule

### Practicum Schedule

Date	Topic/Activity
August 25	Class Meeting <i>Course Syllabus; Course Requirements; ADEPT; Classroom Placements</i>
September 1	Labor Day Holiday
September 8	Class Meeting <i>ADEPT; Lesson Observation and Debriefing; Cooperating Teacher Introductions</i>
September 15	Class Meeting Observations Log: (PD1) How does the teacher develop his/her long range plans for math?
September 22	Class Meeting Observations Log
September 29	Class Meeting Observations Log <b>Lesson Plan #1 Due to CT and US</b>
October 6	Class Meeting Observations Log
October 13	Observations Log <b>Videotaped Lessons (Schedule Date with Cooperating Teacher)</b>
October 20	Observations Log
October 27	Observations Log <b>Lesson #1 Analysis Due</b>
November 3	Observations Log <b>Lesson Plan #2 Due to CT and US</b>
November 10	Observations Log
November 17	Observations Log <b>Activity-based Lessons (Schedule Date with CT and US)</b>
November 24	Observations Log
December 1	<b>Lesson #2 Analysis Due</b> <b>Classroom Log with Practicum Documentation Due</b>

After initial contact is made with the cooperating teacher, the scheduling of visits to the class should be arranged between the candidate and the cooperating teacher. Once determined, provide the days and times of the visits to the university instructor.