



**Teaching Science in the Elementary School  
AEDL 432 & 432P**

**Methods and Materials for Teaching People with Emotional and/or  
Behavioral Disorders  
AEDX 435 & 435P**

**Mission Statement: The USC Aiken 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.**

Instructors:	<b>Dr. Jeff Priest</b>	<b>Dr. Windy Schweder</b>	Meeting Time:	<b>T 8:30-1:30</b>
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**I. Descriptive Information**

**A. AEDL 432 Teaching Science in the Elementary School**

1. Catalog Description: (3 hrs.) (Prereq: Admission to Education Professional Program or special permission of the Dean; completion of at least 4 credit hours of natural or physical science; Coreq.: AEDL 432P, Junior Block) Materials and programs for teaching science in the elementary school.

**B. AEDL 432P Practicum in Teaching Science in the Elementary School**

1. Catalog Description: (1 hr.) (Prereq: Admission to Education Professional Program or special permission of the Dean; AEDC 310; Coreq: AEDL 432, Junior Block) Supervised clinical experience in an elementary education classroom. Observations and participation in a classroom setting are required with a focus on science learning experiences, materials and equipment. Seminars and group discussion included.

**C. AEDX 435 Methods and Materials for Teaching People with Emotional and/or Behavioral Disorders:**

1. Catalog Description: (3 hrs.) (Preq: AEDX 400; admission to Education Professional Program or special permission from the Dean) Methods and procedures related to the development and establishment of satisfactory adaptive behaviors and academic skills for people with emotional and/or behavioral disorders, including the development of Individualized Educational Programs.

D. AEDX 435P Practicum in the Instruction of People with Emotional and/or Behavioral Disorders:

1. Catalog Description.(1 hr.) (Preq: AEDX 400; admission to Education Professional Program or special permission from the Dean). Field experiences in the application of methods and materials for people with emotional and/or behavioral disorders, including the development of Individualized Education Programs.

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 elementary science classes that include students with and without emotional and/or behavioral disorders (EBD)*.

## II. Course Goals and Objectives

### A. Course Goals

The candidate will develop the skills to effectively teach standards-based science to all students in grades 2 – 6. Knowledge of both the National Science Education Standards and the South Carolina Science Academic Standards will be emphasized. Additionally, candidates will learn how to implement modifications and accommodations to help all learners succeed. Finally, candidates will learn strategies for successfully collaborating with other professionals in the field.

### B. Instructional Objectives

Each Candidate will:

1. formalize what is science and recognize the crucial role of science education in society.
2. understand the spirit and be able to implement the national and state science education standards.
3. understand the readiness for learning and discover what are realistic classroom expectations for all elementary school students.
4. learn to interact with and motivate all elementary students, manage their behavior toward positive outcomes, as well as provide varying instructional strategies to accommodate for individual differences.
5. select, based on developmental appropriateness and national and state standards, the most appropriate curriculum materials from commercial and other sources.
6. use contextual factors to plan, co-plan, and sequence successful science instruction for periods of a few minutes to one school year that include relevant applications to the students' communities. (Contextual factors include information such as gender, race, ethnicity, SES, and IEPs).
7. Demonstrate basic competencies in using data-based intervention and formative evaluation approaches to writing instructional plans.
8. use individual and co-teaching approaches to teach science in the inclusive classroom.
9. use appropriate educational and assistive technologies.

10. assess student learning by traditional, authentic, and alternative means.
11. identify best practices and research-based information in developing educational programming for students with emotional and/or behavioral disorders (EBD).
12. Develop procedures for reporting both appropriate and problematic social behaviors of individuals with EBD.

### III. Course Readings

#### A. Required Texts and Readings:

National Committee on Science Education Standards and Assessment. (1996). *National Science Education Standards*. Washington, D. C.: National Research Council.  
[http://www.nap.edu/openbook.php?record\\_id=4962&page=R1](http://www.nap.edu/openbook.php?record_id=4962&page=R1)

ADEPT Standards [http://www.scteachers.org/adept/evalpdf/adept\\_guidelines.pdf](http://www.scteachers.org/adept/evalpdf/adept_guidelines.pdf)

South Carolina Science Standards: <http://ed.sc.gov/agency/offices/cso/standards/science/>

Readings from *Science & Children* <http://www.nsta.org/elementaryschool/>

Readings from *Teaching Exceptional Children*  
<http://www.cec.sped.org/content/navigationmenu/publications2/teachingexceptionalchildren/>  
and  
*Teaching Exceptional Children Plus* <http://escholarship.bc.edu/education/tecplus/>

#### Required Texts for Special Education Majors

**Downing, J. A. (2007). *Students with emotional and behavioral problems: Assessment, management, and intervention strategies*. Upper Saddle River, NJ: Pearson Merrill/Prentice Hall.**

#### B. Supplemental Readings:

The following texts may be accessed free online or purchased at <http://www.nap.edu>

Atkin, J. M., Black, P., & Coffey, J. (Eds.). (2000). *Classroom assessment and the National Science Education Standards: A guide for teaching and learning*. Washington, D. C.: National Research Council.

Center for Science, Mathematics, and Engineering Education. (1997). *Introducing the National Science Education Standards*. Washington, D. C.: National Research Council.

Committee on Development of an Addendum to the National Science Education Standards on Science and Technology. (2000). *Science and technology and the National Science Education Standards: A guide for teaching and learning*. Washington, D. C.: National Research Council.

Committee on Science Education K-12 and the Mathematical Sciences Education. (2000). *Designing mathematics or science curriculum programs: A guide for using mathematics and science education standards*. Washington, D. C.: National Research Council.

Olson, S., & Loucks-Horsley, S. (Eds.). (2000). *Inquiry and the National Science Education Standards: A guide for teaching and learning*. Washington, D. C.: National Research Council.

Singer, M., & Tuomi, J. (Eds.). (1999). *Selecting instructional materials: A guide for K-12 science*. Washington, D. C.: National Research Council.

Additional readings as assigned.

### **Professional Organizations**

National Science Teachers Association (NSTA): <http://www.nsta.org>

Council for Exceptional Children (CEC)  
<http://www.cec.sped.org//AM/Template.cfm?Section=Home>

South Carolina Science Council (SC)<sup>2</sup> : <http://scssi.sctev.org/sc2>

#### **IV. Instructional Procedures**

A variety of instructional procedures will be used to further your awareness and experiential background of the diversity available for instruction. Instructional approaches may include, but are not limited to: lecture, co-teaching, small and large group discussions, demonstrations, activity groups, projects, and hands-on activities.

#### **V. Course Requirements**

##### **A. Administrative Requirements**

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 5<sup>th</sup> ed.*

The following statement is to be included on the first page of every assignment and on every exam:

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 \_\_\_\_\_

**If the Honor Code is not on the assignment and signed and dated, the grade for that assignment will be a zero.**

2. USCA Code of Conduct: Students 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, students should exhibit those behaviors expected of professionals.

- Please switch all cell phones and pagers to a non-audio mode during class.
- Please do not bring children or guests to class unless prior permission has been given by the professor.
- Do not submit full or partial assignments from other classes for requirements in this course.

3. **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 B&E, (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.

4. Attendance and Class Participation Policy: As a part of your professional development, class attendance and participation is essential and punctuality is expected. You are responsible for material covered in class during any absence and for checking with the instructor or classmates about any changes in scheduling or assignments that may have been made. Missed in-class exercises may not be made up. If you anticipate an absence, notify the instructor in advance of the absence. Missing more than two class sessions may result in an F for the course. Points will be deducted from the final grade of anyone arriving late for class or leaving class early.

5. Late Assignments: No assignments will be accepted after 8:30 AM on the due date. If you are absent the day an assignment is due, please make arrangements to have it turned in by a peer by 8:30 AM.

## VI. Evaluation and Grading Scale

### A. Assignment Criteria:

All out-of class writing must be completed on a computer, making use of spell check, and if available, a program which checks for grammatical errors. Fonts used must be of block type and size 12. Format and citations must use APA (5<sup>th</sup> edition) criteria. Please do not use any fancy binders or plastic sheets. Simply staple work in the left-hand corner.

B. Labeling electronically submitted documents: Each electronically submitted document should be labeled with your last name and then the name of the assignment (e.g., Schweder student interview). Documents created and turned in as a team should be labeled with the last names of both candidates in alphabetical order (e.g., priest-schweder lesson plan). Correct labeling of the document is important so that we can easily track all the assignments that are completed.

**Points will be deducted** for assignments that are incorrectly labeled. If you have problems sending a MS Word document, please ask for instructions on how to convert a file to Rich Text Format (.rtf).

### **C. Grading:**

Grading in this course will be determined, in part, by the critical reading and writing activities regarding the course material and by attendance and contribution to class and group activities. Evaluation will focus on the ability to identify important ideas, articulate the complexity of issues, recognize different points of view, and apply content in meaningful ways. If you are unable to attend class, it is your responsibility to acquire the information covered in that session. This includes all information from media used in class, such as handouts, films, and video and audiotapes, as well as presentations and discussions. Grades will be determined through a variety of written and non-written activities, including exams, as well as class attendance and participation.

#### A Narrative Description of Grades (from John H. Lounsbury)

The grade of *A* is distinctly a mark of superiority. It represents much more than mere competence in meeting assignments. There is a “plus factor” involved. “*A*” students do not only what is expected of them but go beyond that. They dare to be themselves, use initiative, and don’t need prodding. Even their occasional failures are magnificent failures; like the late Babe Ruth who struck out with a mighty swing. They work well with groups and regularly assume leadership in groups and in class.

The grade of *B* indicates a high level of accomplishment, though the plus factor may be diminished. It represents less originality, less artistry, less depth of analysis than the *A*, yet all three qualities are sometimes present. Able students that do not live up to potential may warrant this grade as well as limited-ability students who apply themselves fully and effectively. *B* students cooperate well in groups and sometimes assume leadership.

The grade of *C* represents accomplishment that is in the middle state, sufficient but not high. *C* students do what they are asked to do in an acceptable fashion but little more. They may fail to live up to their potential and often require prodding. They cooperate but offer little leadership.

The grade of *D* covers a multitude of sins, such as carelessness, indifference, or laziness; or it may reflect lack of reading skill, writing ability, or difficulty in concentrating. *D* students rarely, if ever, assume leadership or offer assistance in group projects although they do not obstruct the progress of others.

The grade of *F* indicates indifference and failure to make an honest effort. It is not given to students who make a conscientious effort to master the material or apply themselves. It is reserved for those who apparently do not care, who procrastinate, who openly refuse to cooperate, and those whose behavior interferes with the ability of others to learn.

The following assignments are due no later than the end of the class period on the due date of the assignment.

1. Student interviews 5 points **JAN 27**
2. Lesson Plans 20 points **DUE FEB 10, 23; MAR 3, 17, 31** and others as assigned

3. KidTools Project 5 points **FEB 24**
  4. Modified TWS 25 (videotaped lesson) next to last lesson points **APR 14**
  2. Instructor evaluation of final lesson 20 points **APR 14**
  5. Science Fair Project as a class 5 points **APR 21**
  6. Discussion Board 10 **TBA**
  7. Class Participation 10 points
- Total points= 100 points

### Grading Scale

90-100%=A  
 87-89%=B+  
 80-86%=B  
 77-79%=C+  
 70-76%=C  
 67-69%=D+  
 60-66%=D  
 <60%=F

### VII. Tentative Schedule

Date	Topic	Resource
Tuesday, January 13 <sup>th</sup>	Introduction and overview of syllabus and standards Candidate pictures Pretest Foam Activity (inquiry) Unknown canister (process skills) ADEPT jigsaw activity Assign placements	Syllabus, Science Standards ADEPT Standards
Tuesday, January 20 <sup>th</sup>	Overview of Blackboard Pretest results Five questions ask when observing Review of ADEPT forms How to provide constructive feedback using ADEPT forms Revised Bloom's Taxonomy CAI Standards Alignment Activity Roles of general and special educators	
Wednesday, January 21	Meet and greet Oakwood Windsor Elementary School Faculty, 2:30 PM	

<p><b>OBSERVATION WEEK</b>  Monday, January 26<sup>th</sup> observe CT  Tuesday, January 27<sup>th</sup> observe CT  Wednesday, January 28<sup>th</sup>  Observe Ms. Wright for ½ a day and Sped teacher for ½ a day  Thursday, January 29<sup>th</sup> Meet with junior block faculty (Priest and Schweder 10:15-11:45)</p>	<p>Debrief CTs lessons  Review of Lesson Plan Template  Questions educators ask before co-teaching</p>	<p>Science Standards, ADEPT Standards</p>
<p>Tuesday, February 3<sup>rd</sup></p>	<p>Introduce KidTools Program and Assignment  Five steps to collaborative settings  Dimensions of successful inclusive classrooms  Lesson taught by OWES educator  Science Kit Lesson  Assessment</p>	<p>Science Standards, ADEPT Standards, Handouts</p>
<p>Tuesday, February 10<sup>th</sup></p>	<p>Science Kit Lesson  Candidates teach a lesson to each other  Debrief candidate lessons</p>	<p>Science Standards, ADEPT Standards, Handouts</p>
<p><b>OBSERVATION WEEK</b>  Monday, Feb. 16<sup>th</sup> observe CT  Tuesday, Feb. 17<sup>th</sup> observe CT  Wednesday, Feb. 18<sup>th</sup>  Observe Sped teacher for ½ a day  Thursday, Feb. 19<sup>th</sup>  Meet with junior block faculty (Priest and Schweder 10:15-11:45)</p>	<p>Debrief CT observations  Lesson plan conferences  Six approaches of co-teaching  Finding shared planning time</p>	<p>Science Standards, ADEPT Standards, Handouts</p>
<p>Monday, February 23<sup>rd</sup> 8:30-1:30</p>	<p>Practice lessons to teach next week</p>	<p>Science Standards, ADEPT Standards</p>

Tuesday, February 24 <sup>th</sup>	Teaching in classrooms and debrief, other activities	Science Standards, ADEPT Standards
Tuesday, March 3 <sup>rd</sup>	Candidates practice for next week, other activities	Science Standards, ADEPT Standards
Tuesday, March 10 <sup>th</sup>	SPRING BREAK-NO CLASSES	
Tuesday, March 17 <sup>th</sup>	Teaching in classrooms	Science Standards, ADEPT Standards
Tuesday, March 24 <sup>th</sup>	Practice for next week	
Tuesday, March 31 <sup>st</sup>	Teaching in classrooms (TWS & videotaped lesson)	Science Standards, ADEPT Standards
Tuesday, April 7 <sup>th</sup>	Practice for next week	Science Standards, ADEPT Standards
Tuesday, April 14 <sup>th</sup>	Teaching in classrooms (ADEPT Observation)	Science Standards, ADEPT Standards
Tuesday, April 21 <sup>st</sup>	Present Science Fair Project	Science Standards, ADEPT Standards
Tuesday, May 5 <sup>th</sup> 8:30-11:30	Conferences (TWS, ADEPT observations)	