CEDAR CREST COLLEGE EDUCATION DEPARTMENT

EDU517: CURRICULUM, ASSESEMENT AND LEARNING EXPERIENCES FOR SCIENCE IN THE ELEMENTARY SCHOOL (K-6)

FALL – 2009 Tuesdays 6:45 – 9:45 PM

Instructor: Jessica McElroy

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*Please note that I will only correspond via Cedar Crest e-mail accounts

Course Description: Students are exposed to the various methodologies to successfully teach science to elementary students, integrating hands on activities, and challenging extensions to standard lessons/activities. The classes are modeled on the constructivist approach to science education. This course includes a review of science concepts that relate to the many misconceptions held by elementary students. National and PDE standards are used extensively for curriculum and assessment development.

Course Outcomes:

- 1. The student will demonstrate an understanding of the inquiry-based science model.
- 2. The student will be able to plan an inquiry-based science lesson using the CCC lesson plan format.
- 3. The student will demonstrate how to integrate technology into science teaching.
- 4. The student will demonstrate an understanding of assessment as related to the area of science.
- 5. The student will demonstrate an understanding of scientific terminology and concepts.
- 6. The student will demonstrate an ability to integrate science concepts with other areas of elementary instruction.

Required Text:

Bass, J.E., Contant, T.L., Carin, A.A. (2009). Teaching Science As Inquiry (11th ed). Boston, MA: Pearson.

Suggested Readings: Students will be encouraged to investigate a variety of resources pertaining to particular topics throughout the course. Students will be directed toward topics relevant to subject matter addressed during the course.

Student Accommodations: Students with documented learning disabilities who may need academic accommodations should discuss these needs with their professors during the first two weeks of class. Students with disabilities who wish to request accommodations should contact the Advising Center during the first week of class.

Honor Philosophy: The Cedar Crest Honor Philosophy is based upon the principle that, as a self-governing body, students have the ability to create an atmosphere of trust and support. Within this environment, individuals are empowered to make their own decisions, develop personal regard for the system under which they live, and achieve a sense of integrity and judgment that will guide them through life.

The formal honor code adopted by CCC as outlined in the college catalogue and student handbook will be followed in this course. Appropriate behavior is implicit in the Cedar Crest College Honor Code.

Classroom Protocol: Appropriate classroom behavior is implicit in the Cedar Crest College Honor Code. Such behavior is defined and guided by complete protection for the rights of all students and faculty to a courteous, respectful classroom environment. That environment is free from distractions such as late arrivals, early departures, inappropriate conversations, and any other behaviors that might disrupt instruction and/or compromise students' access to their Cedar Crest College education. In order to minimize distractions, please turn cell phones off during class.

Attendance and Late Arrivals: As part of your learning responsibility, your attendance at all class meetings is expected and a vital part of the learning process. If vacations, athletic activities, professional duties, medical appointments, or any other conflicts prevent you from fully attending all classes, your are strongly encouraged to take this course during another semester. If an illness or emergency occurs during the semester, you are responsible for contacting the course instructor to make up work missed. Due to the interactive nature of this course, however, there will be assignments that you will not be able to make up if you are absent. Your attendance and participation will be scored using the professional rubric provided with this document.

Late Assignments: Assignments are due at the beginning of each class period. If an assignment is handed in after this time, including email, it is considered late. Late assignments will be lowered a full letter grade for each day they are overdue unless other arrangements are approved in advance by the professor.

Plagiarism: Plagiarism is regarded as a failure to comply with the college honor code. Therefore, any student who is documented as cheating on an assignment, plagiarizing or otherwise breaking the honor code will receive an "F" for that assignment. This policy includes plagiarizing by not citing the material accurately. Please use the APA manual for accuracy. Students may not us the same paper, unit, or lesson for more than one course without the permission (in writing) of the instructor.

Course Requirements:

- 1. **Lesson Plans** (125 points): You will develop three lesson plans following the CCC format. One lesson plan will be presented at a science fun night for second graders. The other two lessons can be on a topic of your choice but must be for different grade levels. You will receive detailed information about the development of the lesson plan in class. See rubric for scoring guide.
- 2. **Science Fun Night Presentation** (100 points): You will present a chosen science lesson to an audience of second graders. You are responsible for purchasing the necessary supplies to complete the presentation. You will receive detailed information about your presentation in class. See rubric for scoring guide.
- 3. **Website Reviews** (50 points): You will review 4 websites. Two websites should be dedicated to student use and two websites should be dedicated to teacher use. You will evaluate the website based on science content, arrangement/organization, ease of use, visuals and documentation. Each review should be 2 pages in length. See rubric for scoring guide.
- 4. **Website Presentation** (25 points): You will choose one of the websites you reviewed and give a ten minute presentation to the class. Your presentation should include the strengths and weaknesses of the site and how this site could be best used by teachers or students. You must submit the name of your website for approval in order to avoid duplicate presentations.
- 5. **Literacy Workstation**: (100 points): You will create a literacy workstation that revolves around a chosen science topic. The workstation activity must have an accountability or assessment tool. See rubric for scoring guide.
- 6. **Class Reflections**: (50 points): Each week you will complete a class reflection. You will be asked to answer one or two questions regarding topics covered in class and also to reflect on information learned in class. See rubric for scoring guide.
- 7. Class Participation and Professionalism: (50 points): It is essential that you participate in all class discussions and activities in order to understand the course material. Reading assignments must be completed to participate in class discussions and activities. See rubric for scoring guide.

Total Points: 500			
94 - 100%	A	74 - 76%	C
90 - 93%	A-	70 - 73%	C-
87 - 89%	B+	67 - 69%	D+
84 - 86%	В	63 – 66%	D
80 - 83%	B-	Below 63%	F
77 - 79%	C+		

Please Note: Any student receiving a grade below a B in any education course will have to re-take the course to be certified in the State of Pennsylvania. This is a Pennsylvania Department of Education requirement.