Graduate Course Syllabus

EDU 535C: Early Childhood Health and Science

Center: Online

Course Prerequisites

None

Course Description

This course applies developmental theory to the teaching of science literacy in the early grades. Students will focus on preparing developmentally appropriate experiences that promote investigation, problem solving, and exploration. Methods of instruction and assessment are practiced. Attention will be given to designing constructivist lesson and unit plans that align with science literary standards.

Course Outcomes

- Evaluate and describe standards-based PreK–6 science curricula
- Demonstrate pedagogical content knowledge and science content knowledge through the proper use of specific language, behaviors, and skills
- Design developmentally appropriate instructional materials to create authentic learning experiences in science, health, and wellness crucial to teaching early learners
- Develop skills and strategies for classroom assessment including using informal assessments and tests, observations, and daily student performance to plan instruction and monitor student progress
- Design instruction illustrating the scientific method through the use of the observation and inquiry processes

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, MBS Direct, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Teaching Science Through Inquiry and Investigation – (LL) With Access
T. L. Contant, J. E. Bass, & A. A. Carin
Pearson
12th Edition
2014
ISBN: 978-0-13-340079-3

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	10	25	250
Short Paper	3	50	150
Presentation	1	50	50
Diagram	1	50	50
Critical Task & Field Experience			
Milestones	4	25	100
Critical Task	1	250	250
Field Experience	1	150	150
			Total Course Points: 1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

Grade	Numerical Equivalent	Points
A	93–100	4.00
A-	90–92	3.67
B+	87–89	3.33
B	83–86	3.00
B-	80–82	2.67
C+	77–79	2.33
C	73–76	2.00
F	0–72	0.00
I	Incomplete	
IF	Incomplete/Failure *	
W	Withdrawn	

* Please refer to the policy page for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module.

Module	Topics and Assignments
1	The Nature of Science: Elementary Science Literacy Standards *Teaching Science Through Inquiry and Investigation,* Chapter 1 (pp. 9–24) and Chapter 4 (p. 100–102) 1-1 Discussion: Current Science Standards 1-2 Critical Task and Field Experience Review 1-3 Short Paper: Actions and Reactions
2	Health and Wellness—How and Why Are They Associated With Science? 2-1 Discussion: Science and Health/Wellness 2-2 Critical Task and Field Experience Milestone One: Location and Topic Selection
3	What Is Scientific Inquiry? *Teaching Science Through Inquiry and Investigation*, Chapter 1 (pp. 5–8), Chapter 2 (pp. 49–62), Chapter 4 (pp. 87–100), and Chapter 7 (pp. 179–185) 3-1 Discussion: Scientific Inquiry 3-2 Short Paper: Inquiry-Based Questions
4	Concepts and Processes, Communication and Experimentation *Teaching Science Through Inquiry and Investigation*, Chapter 2 (pp. 29–49) and Chapter 3 4-1 Discussion: Concepts and Processes 4-2 Critical Task and Field Experience Milestone Two: Unit Plan Draft
5	The 5E Model for Teaching and Learning *Teaching Science Through Inquiry and Investigation*, Chapter 4 (pp. 102–113) and Chapter 7 (pp. 186–204) 5-1 Discussion: 5E Model of Instructional Design 5-2 Presentation: Designing Instruction Using the 5E Model
6	Assessment and Evaluation in Science and Health *Teaching Science Through Inquiry and Investigation*, Chapter 5 6-1 Discussion: Assessments in Science, Health, and Wellness 6-2 Critical Task and Field Experience Milestone Three: Lesson Plan Draft
7	What Is STEM and What Part Does It Play in the Science Classroom? *Teaching Science Through Inquiry and Investigation*, Chapter 2 (pp. 62–64), Chapter 8, and Chapter 9 7-1 Discussion: Identification of STEM Components 7-2 Short Paper: STEM Integration 7-3 Critical Task and Field Experience Milestone Four: Lesson Plan Delivery

Module	Topics and Assignments
8	How Do We Involve and Challenge All Students? *Teaching Science Through Inquiry and Investigation*, Chapter 10 8-1 Discussion: Involving and Challenging All Students 8-2 Diagram: Cultural Diversity
9	Connecting Science With School, Home, and Community 9-1 Discussion: The Home and School Connection: Communication 9-2 Critical Task: Final Submission
10	The Benefits of Science Centers and Project-Based Learning 10-1 Discussion: Centers and Projects in Science 10-2 Field Experience: Final Submission

Critical Task: Unit Plan and Revised Lesson Plan

The critical task for this course is the development of a unit plan, which consists of a minimum of three lesson topics. You will choose one lesson topic from your unit plan and develop a lesson plan. This will then be combined with your field experience requirement, in which you will deliver the lesson plan to a group of students and then reflect on the experience. Additionally, you will revise the lesson plan you delivered using feedback received from the instructor, as well as your own reflection discovery. While on a much smaller scale, this experience will better prepare you for the various tasks and responsibilities you will face in the classroom.

Attendance Policy

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the full attendance policy.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the full late assignment policy.

SNHU Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

In accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans with Disabilities Act (ADA) of 1990, and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008, Southern New Hampshire University does not discriminate on the basis of disability, including intellectual disability, in admission, treatment, or access to its programs or activities, nor does it discriminate in employment in its programs or activities.

The university prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. A disability is a condition or impairment that impacts a “major life activity” or “major bodily function.”

- **Major life activities** include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.

- **Major bodily functions** include, but are not limited to, functions of the immune system, normal cell growth, and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions. Disabilities include physical, medical (including pregnancy), mental health, and learning needs.

At the beginning of each term, or as soon as you become aware of a disability or accessibility concern, we encourage you to contact the Online Accessibility Center (OAC) to discuss accommodations for which you may be qualified. Reasonable accommodations are established through an interactive process between the student and the OAC.

Note that accommodations are not retroactive and that disability accommodations are not provided until acceptable documentation of a disability and its impact is received and an accommodation letter has been processed. If you are unsure whether your condition qualifies as a disability or accessibility concern, please contact the OAC for determination.

Contact Information:
Online Accessibility Center
Phone: 866-305-9430
Email: oac@snhu.edu

For questions concerning support services, documentation guidelines, or general disability issues, please visit the Online Accessibility Center website.

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the Disability and Accessibility Services website.

Academic Honesty Policy
Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the full academic honesty policy.

Copyright Policy
Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

SNHU Withdrawal Policy
Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.

Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you would like to withdraw permission for use of your work, please complete the Student Work Sample Survey.