

Augsburg College

Course: EED 360

Elementary Science

Dates: 4/4; 4/18; 4/25; 5/9; 5/16; 6/6; 6/20
Times: Saturdays, 8:00-12:00
Classroom: Check WEC office
Instructor: John Stangl
Office hours: Before and after each class
Tele: 651-748-6163 (voice mail 24/7)

Prerequisites: Admission to the Education Department

Required Text: *“Take the ‘Sigh’ Out of Science”* by J. Stangl (available only at Augsburg’s book store)

Technology Requirements: Demonstrate proficiency in writing and delivering learner-centered lessons utilizing technology. Demonstrate proficiency to access and use the Internet, e-mail and standard Word/Excel software.

Course Requirements:

- Actively participate in classroom lab experiences, discussions, and “take-home” science activities.
- Demonstrate effective thinking, data collection/analysis, quantitative reasoning, and problem solving.
- Complete a minimum 10 hours of verifiable fieldwork at a public or private school during this course.
- Design and build a hands-on science lesson using inexpensive manipulatives. Teach this lesson to a class of real children during your fieldwork.
- Revise this lesson plan of what really worked so your peers can replicate your lesson. Be prepared to present your fieldwork lesson to your peers.
- Interview a “scientist” who is **NOT** a relative, friend, neighbor, teacher or co-worker.

Assessment

40% of grade.....self-evaluations and self-reflections

60% of grade.....instructor assessments both formal and informal including: quality of assignments, task management, participation and attendance.

N.B. Assignments must be word processed. Well-developed ideas presented clearly and concisely are expected.

Late assignments earn ½ credit.

Grading As an adult learner, you will start this class with a grade of 4.0

High standard of work 3.5 Above average work 3.0 Mediocre work 2.5 Basic standards met 2.0

(Students *must earn a grade of 2.0 to pass this course*).

Attendance

Due to the nature of hands-on lab work, 100% attendance and appropriate participation are expected. Safety concerns and practical reasons do not permit lab make up work. Absence and tardiness will diminish your learning and that of your peers. Thus, each absence will lower your grade by .5 and each tardy by .25.

Academic Honesty: The Augsburg College policy on academic honesty applies to this course.

Students Rights/Responsibilities:

“Students with diagnosed learning disabilities or physical handicaps may have legal right to course modifications. Please identify yourself to the professor so he might assist you with your course progress. If you need course adaptations or accommodations because of a disability, please see the CLASS Office at 612-330-1053 or the Access Center at 612-330-1749. All students have the right to use the college Counseling and Student Development staff as well as receive assistance from the Writing Lab.”

Course Schedule: Individual topics may vary during the course.

Date	Class Topics	Assignments Due
1 st Session	<ul style="list-style-type: none"> • Course overview • What is Science? • Strategies to engage young minds • Experiencing science yourself 	<ul style="list-style-type: none"> • Read the course syllabus • Purchase “Take the ‘sigh’ Out of Science” • Bring a composition notebook (the type with a cardboard like cover); wide ruled, single subject; 80 – 100 pages. Bring scissors, glue and a set of colored pencils or crayons. NO felt markers.
2 nd Session	<ul style="list-style-type: none"> • Lesson analysis: appropriate science concepts, hands-on activities, and attitudinal development • Developmentally appropriate instruction • More experiencing science yourself 	<ul style="list-style-type: none"> • To be announced
3 rd Session	<ul style="list-style-type: none"> • Tricks of the trade • Student misconceptions • Pre-instructional planning • More experiencing science yourself 	<ul style="list-style-type: none"> • “Interview-a-scientist • To be announced
4 th Session	<ul style="list-style-type: none"> • Lesson analysis: safety and legal concerns • Content verses Process (Hands-on vs. Minds-on) • More experiencing science yourself 	<ul style="list-style-type: none"> • To be announced
5 th Session	<ul style="list-style-type: none"> • Teacher as Facilitator; Direct Instruction; Guided Discovery • Assessment Strategies • More experiencing science yourself 	<ul style="list-style-type: none"> • To be announced
6 th Session	<ul style="list-style-type: none"> • Environmental and Outdoor Education • Integration of science across the curriculum • More experiencing science yourself 	<ul style="list-style-type: none"> • To be announced
Last session	<ul style="list-style-type: none"> • Micro-teaching of fieldwork lesson to your peers • Final Evaluations; wrap up 	<ul style="list-style-type: none"> • “Shoe-Box Final” Hands-on activities + lesson plan with a photo copy for each classmate • Peer reviews; self evaluations

Welcome! I look forward to the learning camaraderie, which I expect will characterize our time together.

John Stangl, instructor