

Integrated Sciences II (NS 172) Fall 2008

Lecture location: MLH B32

Lecture time: TTH 10:30am–11:45am

Lab location: FA 102

Lab time: Tuesday 1:30pm–3:30pm

Instructor: Matthew Brady **Office:** MLH 321 **Office phone:** 792-2828

Office hours: M 12:00pm–2:00pm or by appointment. mjbrady@lcsc.edu

Required texts: Conceptual Integrated Science, Hewitt et al., 2007

General Information

Attendance: I feel that regular attendance is necessary in order for a person to succeed in any class. If you miss a class, it will be your responsibility to get the notes from another student. In the case of labs, there will be **NO MAKE-UP LABS!**

Make-up exams: None unless you have a DOCUMENTED EXCUSE, so do not miss them!! If a make-up exam is necessary, it will be different from the one given on the scheduled day. It will consist entirely of essay questions. This holds true for the lab practicals as well.

Access and Accommodation: If you feel there is any physical or mental challenge to you that impedes your ability to participate in the class, please see me so we can remove or correct the problem. If you have any special medical needs and the building had to be quickly evacuated, also please inform me. Assistance with accommodation can also be found at the Office of Student Life, Room 111, Reid Centennial Hall.

Classroom etiquette: The lecture begins at noon; make it a point to arrive a few minutes early so we can start promptly. If you must be late, enter quickly and quietly. Also, please respect others' desire to learn and do not talk in class; it is very distracting for those around you as well as the instructor.

Cell phones going off in class will NOT be tolerated! They should be put on vibrate or turned off. Do NOT answer cell phones in class. If I here one go off, I will confiscate it and will hold on to it until the class is over. This is your first and only warning.

Academic dishonesty: In the event of academic dishonesty, those involved **will receive an "F" grade for the course** and the violation of the Student Code of Conduct will be referred to the Director of Student Life for judicial action.

As defined in the LCSC Student Handbook, Academic Dishonesty is:

(<http://www.lcsc.edu/osl/SHB/SHBcodeofconduct.htm>)

a) **Cheating**—intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term "academic exercise" includes all forms of work submitted for credit hours.

b) **Fabrication**—intentional and/or unauthorized falsification or invention of any information or the source of any information in an academic exercise.

c) **Collusion** facilitating academic dishonesty—intentionally or knowingly helping or attempting to help another to commit an act of Academic Dishonesty.

d) **Plagiarism**—the deliberate adoption or reproduction of ideas or words or statement of another person as one's own without acknowledgment.

According to the Student Code of Conduct, The sanctions imposed for a violation of this section of the Code are independent of, and in addition to, any adverse academic evaluation which results from the student's conduct. The course instructor is responsible for academic evaluation of a student's work and shall make that evaluation without regard to any disciplinary action which may or may not be taken against a student under the Student Code of Conduct.

Last day to drop: The last day to drop any class this semester is **Friday, November 7.**

Lecture

Objectives:

1. To provide pre-service teachers with an understanding of content in the biological and earth sciences that is taught in the elementary grades (K-6) in most states.
2. To foster enthusiasm and confidence in teaching scientific concepts and processes through asking and answering questions
3. To model a classroom that encourages student and teacher confidence by promoting teamwork and an environment that encourages student exploration

Quizzes: I will give a quiz every Tuesday at the start of class except for the weeks that have a scheduled exam (see schedule for specific times). These are designed to keep you up to speed with the lecture notes as well as the readings from the book. There will be **ten** quizzes in all, **each worth 10 points.**

Exams: Four exams will be given during the 1st half of lab on the dates indicated on the time schedule. They will consist of multiple choice, short answer (one to three sentences), and essay questions. The material for the questions will come from the lecture notes and the book (see note above). Each exam will be worth **100 points.**

Final exam: The final exam will be comprehensive, and will follow the same format as the in-class exams (e.g., essay, multiple choice, and short answer), but will be worth **200 points.**

Laboratory

Objectives (adapted from Dr. Rachel Jameton):

1. To illustrate examples of activities that can be adapted for the elementary classroom
2. To offer strategies for connecting science and literacy that can be used in the elementary classroom, including the science notebook.
3. To provide hands-on experience with in-class material.

Laboratory notebook: The lab notebook will be worth **100 points.** In all lab settings, it is necessary to keep a detailed and accurate account of what is being done, making it easier for an individual to repeat the exact steps of an experiment or see what observations were made. Each lab will involve an activity which may involve several aspects of the scientific method (e.g., observation, experimentation, etc.), and will accordingly need to be recorded in your lab notebook. We will continue the protocol you used in NS 171 that incorporated journaling as a key means of linking science and literacy in the elementary classroom. At the end of each lab I will examine your lab notebook and will assign you points out of a possible 10. There are twelve (12) labs, so your two lowest lab scores will be dropped at the end.

Laboratory practicals: Practical are with-in lab exams that involve a number of stations at which you will identify a specimen and/or structure of that specimen and answer relevant questions or deal with pedagogical

use of equipment relevant to the elementary classroom. There will be **two practicals** each worth **50 points**. Each practical will cover material covered prior to each one.

Science and literacy project (adopted from Dr. Rachel Jameton): One way to handle the difficult task of finding time to fit science into the elementary school curriculum is to combine it with reading. For this project, we will practice finding books that present biological and/or earth science concepts and developing activities to reinforce student learning. These activities will be combined into a small booklet for you to keep. This will be worth **50 points**.

Science outreach in the classroom: I run a science outreach program for the local school districts in the valley, and you will have the opportunity to participate in it. These are activities that are run in a teacher's classroom and will involve time outside of the classroom. You will receive credit for participating in the activity, but will not be graded on it. This will be worth **50 points**.

	Point value	Quantity	Total points
Lecture Quiz	10	10	100
Exam	100	4	400
Final	200	1	200
Lab journal	100	1	100
Lab practicals	50	2	100
Science literacy project	50	1	50
Science outreach	50	1	50
			Total points: 1000

A = 900–1000
 B+ = 880–899
 B = 830–879
 B- = 800–829
 C+ = 780–799
 C = 730–779
 C- = 700–729
 D = 600–699
 F < 600