

# SYLLABUS—ES 105 LAB

Winter 2011  
Western Oregon University

## **General information**

**Karen Brown** Instructor of Earth Science and Mathematics

Office—Natural Science 213

- Office hours listed at right, or by appointment
- Office phone 503-838-8265

M-Tu-W 9:30-11 AM	Tu 3:30-4 PM
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Other contact information

- Email address [brownk@wou.edu](mailto:brownk@wou.edu)  
When sending email, use this class by day and time as the subject of the email.  
For example: "ES 105 Lab Mon 11"
- Check Moodle regularly for keys to lab assignments—at <http://online.wou.edu>

**ES 105 lab is a two hour period**, part of the 5 credits for ES 105

We will meet in NS 017. (circle yours, cross out others)

Class meetings are

Monday 11 AM-12:50 PM	Tuesday 11 AM-12:50 PM	Tuesday 4:00-5:50 PM	Wednesday 11 AM-12:50 PM	Thursday 9 AM-10:50 AM
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Attend at this time unless you make individual arrangements with all instructors involved. If you arrange to attend a different class a certain week, have the other instructor sign the lab, and bring it to my office as soon as you are done with the class. Do not keep it until the next week, since you will not get credit if you turn it in after the key is posted in moodle. If you do are having problems attending at that time, contact me as soon as practical so we can reach an understanding about your attendance. If you have personal circumstances that prevent you from completing the class, you may request a grade of 'incomplete' from your lecture instructor. I will support this if you have completed at least through lab 5, and are passing.

- The lab portion will be 25% of your ES 105 grade—
  - I will give your percentage score to your lecture instructor
  - You must pass the lab (with at least 60%) to pass ES 105

**Required materials: bring these to class each meeting**

- *Earth Science 105 Lab Manual 2011*: Printed by Western Oregon University
- *Conceptual Physical Science, 4<sup>th</sup> ed.*, By Hewitt, Suchocki and Hewitt, 2008
- Scientific calculator—needs to do trig. functions and square roots

**Grading      No late papers accepted**

This lab is worth 100 points, distributed as follows: 7 labs—10 pt. ea., quiz—30 pt.

**Prelabs** will be worth 2 points each.

Prelabs are due at the **beginning** of class. The purpose of these questions is to introduce the topic to you before coming to class. I will determine if you have completed your prelab before class begins. No late prelabs will be accepted. If you are late, and it is done, I may give you half credit. If you arrive after we have finished going over the prelab, you will get no credit for doing it.

**Lab Activities** will be worth 6 points each.

Labs are due at the end of the class period. Turn it in before you leave.

Answer all the parts of the lab assigned, even if you do not need to turn in that page.

Questions on the practical quiz may come from any part of the lab, so make sure it is complete, and do not throw away pages not turned in.

You are encouraged to work in lab-groups on the lab exercises. You may learn more by helping your lab partners. If you are the recipient of help, be sure you understand the problem and the solution/answer, so you can do similar problems on the practical quiz.

- Keys for the labs will be posted on the class moodle\* on Friday after it is turned in.
- If you have to (occasionally) attend another instructor's lab, have the instructor sign your lab, and turn it in to my office as soon as you finish. If you keep it until the next week, you will not get credit for it.

**Post lab Worksheets** are worth 2 points each. They are due at the **beginning of the next lab class** you attend, because you may need to do a little research to answer post-lab questions. Be sure they are turned in on time, because no late papers will be accepted. They will be returned during the same lab in which you gave them to the instructor.

**Practical quiz** will be worth 30 points.

The quiz is scheduled for your class time, during the last week of classes of the term.

The quiz will have questions similar to lab exercise questions, and will be comprehensive. You can use your corrected labs for reference during the quiz, so bring your entire lab book to class on the quiz day. Be sure you go to the keys on moodle, to correct your labs with the right responses to the questions. You may use those corrected labs, but you *cannot use printed copies of keys* during the quiz.

The purpose of this is to allow me to gauge how well you are learning the lab material. The practical quizzes will be individual efforts, without the assistance of your lab partners.

If you know in advance that you have other obligations on your quiz day, please contact me in advance, as soon as is convenient, so we can make arrangements for you to take the quiz. If you miss the quiz due to unforeseen circumstances, contact me as soon as possible. With *written confirmation* of your situation, I can make accommodations for missing the quiz.

### **Schedule**

10-Jan	- 14-Jan	Lab 1	Energy and Energy Transformations
24-Jan	- 28-Jan	Lab 2	Exploring Motion and Gravity
31-Jan	- 4-Feb	Lab 3	Energy of Objects in Motion and Physics of Landslides
7-Feb	- 11-Feb	Lab 4	Relative Dating and Fossils Radioactivity and Numerical Age Determination
14-Feb	- 18-Feb	Lab 5	Introduction to Chemical Reactions
21-Feb	- 25-Feb	Lab 6	Study of Sediments and Sedimentary Rocks
28-Feb	- 4-Mar	Lab 7	Introduction to Topographic Maps Fluvial Landscape
7-Mar	- 11-Mar	<b>Practical Quiz over lab material— Bring a scantron, a calculator and your lab notebook!</b>	

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\* Moodle: modular object-oriented dynamic learning environment: <http://online.wou.edu>

Below is some collected information from Western Oregon University Catalog, 2010-2011. These are included here because they are important to your success in this class. Each excerpt is noted with the page on which it appears in the catalog.

## Winter term Calendar

<b>Classes begin</b>	Monday, January 3
Fee payment & add/drop begin	Monday, January 3
Last day to pay fees without penalty	Friday, January 7
Last day to add courses, change grade options, elect graduate/undergraduate credit or pay fees	Friday, January 14
Last day to drop courses	Friday, February 11
Registration for next term	Monday, Feb. 21 - Friday, Feb. 25
Final examination week	Monday, Mar. 14 - Friday, Mar. 18
Winter term ends	Friday, March 18

(inside front cover)

## University Mission Statement

Western Oregon University is a comprehensive university that creates personalized learning opportunities, supports the advancement of knowledge for the public good and maximizes individual and professional development. Our environment is open to the exchange of ideas, where discovery, creativity and critical thinking flourish, and students succeed. (p. 2)

### College of Liberal Arts and Sciences

Dean Stephen Scheck

#### Mission Statement

The College of Liberal Arts and Sciences provides the central learning experience for all undergraduate students at Western Oregon University. The faculty are committed to engaging students in academic discovery and intellectual growth via the core curriculum, major and minor baccalaureate curricula, and mastery in select graduate programs.

#### Program Objectives

1. Engage students in scholarly pursuits that benefit their preparation for life-long learning and societal engagement.
2. Provide an environment where students may develop disciplinary competencies necessary for their chosen career fields.
3. Provide opportunities for faculty-student mentoring and out-of-classroom learning opportunities.

For more information, see the Web site at: [www.wou.edu/las](http://www.wou.edu/las). (p. 33)

### Natural Sciences and Mathematics

#### Division of the College of LAS

Division Chair Steve Taylor

The Natural Sciences and Mathematics Division is responsible for majors and minors in biology, chemistry, Earth science, integrated science, mathematics and natural science.

#### Mission

To offer quality liberal arts education in Biology, Chemistry, Earth Science, Mathematics, Physics and Pre-Professional Studies. Our students have the opportunity to acquire and assimilate mathematical and scientific knowledge, that they may broaden and refine their understanding of the ever-changing world around them, both while at Western Oregon University and throughout their lives.

#### Program Objectives

1. To help students internalize and apply both the scientific method and major scientific and mathematical concepts and principles.
2. To enhance students' reasoning and problem solving skills.
3. To improve students' individual and collaborative skills in preparation for the global scientific and mathematical challenges of the 21st century. More detailed program information, including program admission requirements can be obtained by contacting the division at: 503-838-8206, or on the Web at [www.wou.edu/las/natsci\\_math/nsmdiv.html](http://www.wou.edu/las/natsci_math/nsmdiv.html). (p. 33-34)

## Institutional aspirations for learning

Students at WOU will be challenged to achieve their highest potential through a rigorous and stimulating curriculum. Between 2004 and 2005, a set of educational goals called Institutional Aspirations for Learning were collaboratively developed by our faculty after focused discussions about the fundamental aims of liberal education in the 21<sup>st</sup> century. These aspirations constitute the core competencies, skills, experiences and values credited to, and expected of, WOU's educational process and its graduates. We believe that these aspirations are the basic building blocks of a high-quality education as well as the foundations for productive careers, life long development and informed citizenship on a local, national and global level.

1. Students will develop more refined critical thinking skills, including advanced analytical, logical and quantitative reasoning abilities as well as excellent problem-solving skills.
2. Students will develop effective communicative abilities, including listening, observing, speaking, writing and dialoguing.
3. Students will become active readers with an enhanced ability to carefully, closely and thoughtfully read a range of texts.
4. Students will acquire field or discipline specific knowledge and they will understand disciplinary modes of intellectual inquiry.
5. Students will develop an interdisciplinary and integrative perspective as they recognize, explore, appreciate and engage the interconnections between disciplines.
6. Students will develop advanced research abilities and they will demonstrate improvements in their information and media literacy.
7. Students will learn how to use appropriate technologies.
8. Students will acquire and demonstrate competencies, skills, attributes and values necessary for successful participation in a diverse, pluralistic and increasingly interdependent world.
9. Students will be able to work effectively in teams.
10. Students will strive to be well-balanced persons capable of making thoughtful and healthy choices.
11. Students will be able to apply theory in relevant, appropriate and reflective ways. (p. 5)

## Disability Services

Director Malissa Larson

The Office of Disability Services facilitates appropriate accommodations on campus for students and visitors with disabilities. Services provided by the office help ensure that students with disabilities are able to participate fully in all of WOU's programs and activities. The needs of each student who has a disability are assessed on an individual basis so that each receives the most appropriate accommodations and/or support. The following list of services provided by the Office of Disability Services are the most commonly requested:

- Accessibility assistance: wheelchair accessibility to buildings and campus grounds, communication equipment (FM systems, audio-looped rooms, TTYs, closed caption decoders, amplified phones), CC-TV, Braille, scanner, voice output computer access and other technical equipment
- Accessibility aides: note takers, readers, transcribers, classroom assistants, exam proctors
- Advising: academic, career, personal/social
- Advocacy: for appropriate accommodations, alternative testing, preferred accessibility aid
- Communication aides: Sign language interpreters who use student's preferred signed communication mode (from ASL to MCE), and oral interpreters are provided upon request for classes, school sponsored activities, and meetings with faculty and staff
- Empowerment: Through networking groups, workshops and interaction with the office staff, students learn of their rights and how to obtain services they need.
- Leisure and social activities: Accessibility assistance and aids are provided to encourage and support the students' full participation in all parts of campus life.
- On-campus housing: accessible to deaf, hard of hearing, blind students and students using wheelchairs or other assistive mobility aids
- Orientation: to the campus and services provided by the Office of Disability Services as well as general university services available

Please contact the Office of Disability Services for more information at 503-838-8250 V/TTY or e-mail [ods@wou.edu](mailto:ods@wou.edu). (p. 26)

## Academic Advising and Learning Center

Director Karen Sullivan-Vance

### Academic Advising Center

Academic advising at WOU is a developmental process designed to help students define their life and career values and goals in relation to their academic plan. Both the student and adviser have a shared responsibility in the ongoing dialogue that helps students maximize their educational experience at WOU. All undergraduate students are required to meet with their academic adviser at least once a term until a degree plan is filed with the Registrar's Office. Students are encouraged to meet with their adviser when they have questions about their educational goals. Students have access to faculty advisers in their major and minor areas of study. In addition, the Academic Advising and Learning Center's professional advisers can advise students about requirements, along with pre-education and undecided students.

The Academic Advising and Learning Center works with:

- Students to identify their life and career goals in relation to possible academic programs
- Undecided students who are exploring different majors
- Students transferring into WOU from another institution
- Students on academic warning, probation or suspension
- Academic requirements for graduation, including the Liberal Arts Core Curriculum (LACC)

For more information, call 503-838-8428 V/TTY, e-mail [advising@wou.edu](mailto:advising@wou.edu) or go to the Web page [www.wou.edu/advising](http://www.wou.edu/advising).

### Learning Center

Academic skills, including study skills and time management, are essential for college success. The Learning Center helps students assess their current academic skills and develop new skills to help them become successful. Services are provided to WOU students at no charge.

Services at the Learning Center include:

- Peer tutoring in most academic subjects by appointment
- Drop-in math tutoring hours
- Tutor-assisted study groups
- Individual study skills assessment and assistance (time management, test taking, note taking, listening, textbook reading, etc.)
- Student computer lab

Tutoring assistance is offered in most academic subjects by peer tutors who have been recommended by faculty. The tutor's goal is to help students improve their knowledge and develop better study habits. Students must be currently enrolled in the requested class at WOU for tutoring. For more information, call 503-838-8501, (503-838-8428 TTY), or go to the web page [www.wou.edu/learning](http://www.wou.edu/learning). (p. 35)

### Standards of Conduct

The following list of prohibited forms of conduct is not all inclusive since it is not possible to list all potential violations.

1. Academic Dishonesty, which includes but is not limited to:
  - a. *Cheating* - intentional use, or attempted use of artifice, deception, fraud, and/or misrepresentation of one's academic work;
  - b. *Fabrication* - unauthorized falsification and/or invention of any information or citation in any academic exercise;
  - c. *Facilitating dishonesty* - helping or attempting to help another person commit an act of academic dishonesty. This includes students who substitute for other persons in examinations or represent as their own papers, reports, or any other academic work of others;
  - d. *Plagiarism* - representing without giving credit the words, data, or ideas of another person as one's own work in any academic exercise. This includes submitting, in whole or in part, prewritten term papers of another or the research of another, including but not limited to the product of commercial vendors who sell or distribute such materials, and the appropriation and/or use of electronic data of another person or persons as one's own, or using such data without giving proper credit for it; or
  - e. *Any use or attempted use of electronic devices* in gaining an illegal advantage in academic work in which the use of these devices is prohibited, and such devices include but are not limited to cell phones, PDAs, laptops, programmable calculators, removable disk drives, etc. (p. 26-27)



## Statement on discrimination, including sexual harassment

Western Oregon University is committed to cultivating an educational and work environment in which all individuals are treated with respect and dignity. Each individual has the right to learn and work in an atmosphere that promotes equal educational and employment opportunities and prohibits discriminatory practices, including harassment. Western Oregon University expects relationships across campus will be free from bias, prejudice and harassment.

This policy statement is intended to reaffirm Western Oregon University's prohibition against discrimination and harassment, clarify types of prohibited conduct, and provide an effective complaint procedure to individuals who believe they have observed or have been subject to prohibited conduct.

### *Discrimination*

Discrimination, for the purposes of this policy, is defined as any act or practice, in form or operation, whether intended or unintended, that unreasonably differentiates among persons on the basis of race, color, religion, national origin, age, sex, marital status, sexual orientation, veteran status or disability or any other status protected under the law.

### *Harassment*

Harassment, for the purposes of this policy, is defined as conduct that creates an intimidating, hostile, or degrading environment that would interfere with the work or academic performance of a reasonable person of the complainant's protected status.

### *Sexual Harassment*

Sexual Harassment, whether or not it be by direct physical attack, as defined below. Sexual harassment includes, but is not limited to, sexual advances, requests or suggestions to engage in sexual conduct, and other physical and expressive behavior of a sexual nature when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment, grade, or used as a basis for any employment or academic decision; or
- Such conduct is unwelcome and has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creates an intimidating, hostile or offensive work or academic environment..

Additional information is available at

[www.wou.edu/sexualharassment](http://www.wou.edu/sexualharassment).

To request a complete hard copy of the discrimination and harassment policy and complaint procedure; to discuss a sexual harassment, harassment or discrimination concern; or to file a sexual harassment, harassment or discrimination complaint, contact Judy Vanderburg at 503-838-8131 or [vanderj@wou.edu](mailto:vanderj@wou.edu).

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