Clackamas Community College

Online Course/Outline Submission System

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Section #1 General Course Information

Department: Sciences

Submitter

First Name: Sarah Last Name: Hoover Phone: 3354 Email: sarahh

Course Prefix and Number: G - 102

Credits: 4

Contact hours

Lecture (# of hours): 33 Lec/lab (# of hours): Lab (# of hours): 33 Total course hours: 66

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: General Geology

Course Description:

For non-science majors. An introductory lab course that explores the Earth's systems and surface features. Systems/processes/hazards explored include rivers, mass wasting, glaciers, groundwater, and deserts. Labs focus on geologic and topographic maps and how they are used to understand geologic features and local geology.

Type of Course: Lower Division Collegiate

Is this class challengeable?

Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

Yes

Check which General Education requirement:

√ Science & Computer Science Is this course part of an AAS or related certificate of completion? No Are there prerequisites to this course? No Are there corequisites to this course? Yes Co-reqs: G-102L Are there any requirements or recommendations for students taken this course? Yes Recommendations: WRD-090 or placement in WRD-098 Requirements: Are there similar courses existing in other programs or disciplines at CCC? No Will this class use library resources? Yes Have you talked with a librarian regarding that impact? Yes (A 'Yes' certifies you have talked with the librarian and have received approval.)* Is there any other potential impact on another department? No Does this course belong on the Related Instruction list? No **GRADING METHOD:** A-F or Pass/No Pass

http://webappsrv.clackamas.edu/courserequest/viewrequest.aspx?submit=true&id=8525

Audit: Yes

When do you plan to offer this course?

/	V	/i	n	t۵	r

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

- 1. observe hydrological processes that occur on earth and explain how they contribute to the formation of surface features and geologic hazards. Assess the impact these features and hazards have on society; (SC1) (SC2) (SC3)
- 2. apply and develop models of stream systems to gather data and discuss the impact society has on rivers with regards to water quality, ecosystems and flooding processes as well as surface features created by erosion/deposition; (SC1) (SC2) (SC3)
- 3. critically evaluate the geologic controls on ground water systems and explain/hypothesis how society is affected by or affects these systems; (SC2) (SC3)
- 4. apply scientific methods/concepts to clearly explain the formation of desert systems, why deserts expand through the process of desertification, and the impact desertification has on the world's population; (SC1) (SC3)
- 5. critically evaluate models on global climate change, explain the effects this process is having on the world's glaciers/oceans/beaches and demonstrate an understanding of the impact of this process on society; (SC1) (SC2) (SC3)
- 6. demonstrate an ability to use topographic and geologic maps to interpret what surface features are present, explain the formation of those surface features and also the geologic hazards associated with them; (SC1) (SC2)
- 7. locate and report positions on a map through the use of longitude/latitude coordinates, UTM coordinates and the rectangular survey system. (SC2)

AAUTAJUT GENERAL EDUCATION OUTCOMES

COURSE OUTLINE MAPPING CHART

Mark outcomes addressed by the course:

- Mark "C" if this course completely addresses the outcome. Students who successfully complete this course are likely to have attained this learning outcome.
- Mark "S" if this course substantially addresses the outcome. More than one course is required for the outcome
 to be completely addressed. Students who successfully complete all of the required courses are likely to have
 attained this learning outcome.
- Mark "P" if this course partially addresses the outcome. Students will have been exposed to the outcome as
 part of the class, but the class is not a primary means for attaining the outcome and assessment for general
 education purposes may not be necessary.

As a result of completing the AAOT/ASOT general education requirements, students will be able to:

WR: Writing Outcomes

- 1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences.
- 2. Locate, evaluate, and ethically utilize information to communicate effectively.
- 3. Demonstrate appropriate reasoning in response to complex issues.

SP: Speech/Oral Communication Outcomes

- 1. Engage in ethical communication processes that accomplish goals.
- 2. Respond to the needs of diverse audiences and contexts.
- 3. Build and manage relationships.

MA: Mathematics Outcomes:

- 1. Use appropriate mathematics to solve problems.
- 2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

AL: Arts and Letters Outcomes

- 1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life.
- 2. Critically analyze values and ethics within range of human experience and expression to engage more fully in local and global issues.

SS: Social Science Outcomes

- 1. Apply analytical skills to social phenomena in order to understand human behavior.
- 2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

SC: Science or Computer Science Outcomes

- **s** 1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions.
- **s** 2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically examine the influence of scientific and technical knowledge on human society and the environment.
- **s** 3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

CL: Cultural Literacy Outcome

1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

Outcomes Assessment Strategies:

√ General Examination

√ Multiple Choice Test

✓ Other Assessment Tools: Practical lab exams and labratory work

Major Topic Outline:

- 1. Mass wasting:
- a. Types and controls of mass movement.
- b. Influence of water on mass wasting.
- c. Sediments and mass wasting.
- d. Recognizing mass wasting in process.
- e. Remediation techniques for mass wasting.
- f. The effects on society and the NW.
- 2. Deserts and Wind Activity:
- a. Types of deserts and how deserts form.
- b. Characteristics and features of deserts.
- c. Erosion processes and cycles in deserts.
- d. Wind activity.
- e. Sand dune formation.
- f. World distribution of deserts.
- g. Desertification and the effect on society.
- 3. Stream Processes:
- a. Hydrologic cycle.
- b. Stream energy and erosion.
- c. Stream flow dynamics.
- d. Stream depositional processes.
- e. Fluvial cycle and landforms.
- f. Flooding and societal concerns.
- 4. Groundwater:
- a. Groundwater accumulation and movement.
- b. Aquifers.
- c. Dynamics between surface water and groundwater.
- d. Groundwater solution and deposition.
- e. Thermal springs and geysers.
- f. Environmental and societal concerns.
- 5. Glaciers and Climate Change:
- a. Formation of glaciers.
- b. Types of glaciers.
- c. Glacial movement.
- d. Glacial erosion.
- e. Glacial deposition.
- f. Pleistocene glaciation.
- g. Causes of climatic changes.

G 102 Lab—Major Topic Outline

- 1. Map reading techniques: Rectangular survey system coordinate system.
- 2. Map reading techniques: Longitude and Latitude coordinate system.
- 3. Using remote sensing, satellite images and maps to interpret environment Maps and map making.
- 4. Maps and map reading.
- 5. Map reading techniques: UTM coordinate system and topographic map intro.
- 6. Topographic map interpretation, stereoscopes and topographic profiles.
- 7. Exploring stream systems and flood planes, recognizing stream features using maps and the influence of flooding on society.
- 8. Introduction to geologic maps.
- 9. Geology of Oregon City.

Does the content of this class relate to job skills in any of the following areas:

Increased energy efficiency	No
2. Produce renewable energy	No
3. Prevent environmental degradation	No
4. Clean up natural environment	No
5. Supports green services	No

Percent of course: 0%

Section #2 Course Transferability

Concern over students taking many courses that do not have a high transfer value has led to increasing attention to the transferability of LDC courses. The state currently requires us to certify that at least one OUS school will accept a new LDC course in transfer. Faculty should communicate with colleagues at one or more OUS schools to ascertain how the course will transfer by answering these questions.

- 1. Is there an equivalent lower division course at the University?
- 2. Will a department accept the course for its major or minor requirements?
- 3. Will the course be accepted as part of the University's distribution requirements?

If a course transfers as an elective only, it may still be accepted or approved as an LDC course, depending on the nature of the course, though it will likely not be eligible for Gen Ed status.

Which OUS schools will the course transfer to? (Check all that apply)

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✓ EOU (Eastern Oregon University)
✓ OIT (Oregon Institute of Technology)
✓ SOU (Southern Oregon University)
✓ OSU (Oregon State University)
✓ OSU-Cascade
✓ WOU (Western Oregon University)

Identify comparable course(s) at OUS school(s)

G102 and lab

How does it transfer? (Check all that apply)

✓ general education or distribution requirement
✓ general elective
:

Provide evidence of transferability: (minimum one, more preferred)

✓ Correspondence with receiving institution (mail, fax, email, etc.)
✓ Other. Please explain.
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Catalog

First term to be offered:

Next available term after approval

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