

# Syllabus for FNR-80 Introduction to Watershed Management

## About this Class:

### Course Information

**Semester & Year:** Spring 2022

**Course ID & Section #:** FNR-80-E3119

**Instructor's name:** Liz Houghton

**Day/Time of required meetings:** Tuesday: Lecture 8:30-10:30; Lab 1:15-4:25

**Location:** AT108

**Course units:** 3

### Instructor Contact Information

Please contact me through Canvas email, pronto or chat anytime

Phone number: 1-707-599-6138

Email address: [liz-houghton@redwoods.edu](mailto:liz-houghton@redwoods.edu)

### Catalog Description

An introduction to hydrology and the science of managing watersheds. Topics include atmospheric inputs, runoff and erosion, storm-flow components, evapotranspiration impacts and groundwater use. Students participate in field exercises on evaluation and measurement of water resources

### Course Student Learning Outcomes

1. Describe and classify features and hydrologic processes of watersheds
2. Explain potential impacts of management activities on streamflow, groundwater storage, sediment production, and water quality
3. Analyze the relationships between climate, weather, and vegetation and how these factors affect the movement of water through watersheds.
4. Lab specific outcome: Assess the physical and biological characteristics of watersheds.

### Evaluation & Grading Policy

- Your final grade will be calculated based on the grade in the canvas gradebook and overall participation and involvement in course. For example: a grade of B could be bumped to a B+ based on participation such as asking questions, looking for clarification, active learning and responding to emails and announcements
- The highest percentage in the class will be used to calculate the final grade.
- All assignments will be graded on level of completeness. All answers must be written in complete sentences unless asking for a list or one word response

## Grading categories and percentages

- Forty percent of your grade will come the lecture portion of the course and 60% will come from the lab. The table below shows the breakdown of the activities and percentages

Course category		Percent of total grade
Lecture		
Lecture activities	10%	40%
Reading responses	10%	
Final	20%	
Lab		
Lab Exercises/write-ups	25%	60%
Lab Quizzes (3)	20%	
Ryan’s Creek Watershed summary report	15%	

<b>A</b> = 93-100%	<b>B +</b> = 88-89%	<b>C +</b> = 76-79%	<b>D</b> = 51 – 69%
<b>A-</b> = 90 – 92%	<b>B</b> = 83-87%	<b>C</b> = 70 -75%	<b>F</b> = 50% or below
	<b>B-</b> = 80-82%		

## Assignment Details

- Weekly reading responses (10% of total grade)

Each week you are expected to read the material provided in each module before coming to class on Thursday. The reading responses are due on Monday night (11:59) each week. These responses are a good way for me to know how well you understand the material.

- Lecture activities (10% of total grade)

In the lecture portion of the class, you will be expected to interact in small groups or individually through hands-on learning activities. These activities will take place both inside and outside. The handouts for these activities will be due at the end of the class. There is no make-up work for lecture activities

- Lab write-ups (40% of total grade)

Labs will occur both in the classroom and out in the field. After each lab activity you are expected to write a through report based on the prompts provided in Canvas. These reports will be submitted through Canvas and are due on Thursday (11:59) each week.

- Lab Quizzes (20% of total grade)

This course is divided into three sections: Watershed description, Hydrologic processes and Watershed management. There is a quiz after the completion of each of these sections. These quizzes will be given online within a certain time period. Quizzes will be available on all day on Friday in Canvas and you will have approximately 1 hour to take the quiz.

### Make-up Policy

- There are no make-ups for missed lecture and lecture activities
- Half-credit can be earned on the lab by answering the questions on the lab report prompt

### Posting grades and Feedback

- **Posting grades:** Grades will be posted within 10 days after turning in any assignment.
- **Feedback:** Feedback for assignments will be provided through the Canvas grade book. Please be sure you know how to check your grade and feedback in Canvas. (see the "know Canvas" and "Getting started" module)

### Course Calendar

- The tentative course calendar is posted on the next page. Depending on student understanding and mastery of topics some topics may be extended.

## Course Calendar

Week	Date	Watershed Topic	Lab Quiz/Paper due dates
1	1/20	Lecture: Introduction to watersheds	
		Lab 1: Watersheds and topo maps	Lab write-up due 1/24
2	1/27	Lecture 2: Geology and vegetation	
		Lab 2: Ryan's Creek topography & veg	Lab write-up due 1/31
3	2/3	Lecture 3: Soil properties	
		Lab 3: Soil maps of Ryan Creek	Lab write-up due 2/7
4	2/10	Lecture 4: Hydrologic cycle	<b>Quiz 1: watershed 2/11</b>
		Lab 4: precipitation in Humboldt Bay	Lab write-up due 2/14
5	2/17	Lecture 5: interception and ET	
		Lab 5: evaporation in Ryan's Creek	Lab write-up due 2/21
6	2/24	Lecture 6: infiltration and groundwater	
		Lab 6: Infiltration test at Ryan creek	Lab write-up due 2/28
7	3/3	Evaluating infiltration test	
		Lab 7: Soil water movement	Lab write-up due 3/7
8	3/10	Lecture 8: Streamflow	
		Lab 8: Streamflow measurement	Lab write-up due 3/14
9	3/17	<b>Spring Break</b>	
10	3/24	Lecture 9: Intro to watershed mgmt	<b>Quiz 2: Hydrology 3/25</b>
		Lab 9: McKay community Forest	Lab write-up due 3/28
11	3/31	Lecture 10: Erosion	
		Lab 10: Roads	Lab write up due 4/4
12	4/7	Lecture 11: Water Quality	
		Lab 11: Water quality testing	Lab write-up due 4/11
13	4/14	Lecture 12: Fish	
		Lab 12: Fish habitat Ryan's Creek	Lab write-up due 4/18
14	4/21	Lecture 13: Wetlands	
		Lab 13: Ryan Creek slough	Lab write-up due 4/25
15	4/28	Lecture 14: Social aspects t	
		Lab 14: Forest mgmt. in Ryan Creek	Lab write-up due 5/2
16	5/5	Lecture 15: The future	<b>Quiz 3: management issues 5/6</b>
		Lab 15: Humboldt Bay & climate change	Lab Summary due 5/6
Final	5/12	Final: 8:30 to 10:30 or TBA	<b>Ryan Creek Summary due</b>

## About your instructor:

**Instructor Name:** Liz McGee=Houghton

### Contacting your instructor

- **Primary contact:** Always contact me through Canvas email or chat anytime ( I will check both of these often)
- **Cell Phone number:** 707-599-6138
- **Email address:** [liz-houghton@redwoods.edu](mailto:liz-houghton@redwoods.edu)
- **Alternate email:** [elizhoughton@gmail.com](mailto:elizhoughton@gmail.com)

## About you, the student:

### Student Accessibility

Students will have access to online course materials that comply with the Americans with Disabilities Act of 1990 (ADA), Section 508 of the Rehabilitation Act of 1973, and College of the Redwoods policies. Students who discover access issues with this class should contact the instructor.

College of the Redwoods is also committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1<sup>st</sup> floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

During COVID19, approved accommodations for distance education classes will be emailed to the instructor by DSPS. In the case of face to face instruction, please present your written accommodation request to your instructor at least one week before the first test so that necessary arrangements can be made. Last-minute arrangements or post-test adjustments cannot usually be accommodated

### Admissions deadlines & enrollment policies

Spring 2022 Dates

- *Classes begin: 01/15/22*
- *Last day to add a class: 01/21/22*
- *Martin Luther King, Jr's Birthday (all campuses closed: 01/17/22*
- *Last day to drop without a W and receive a refund: 01/28/22*
- *Census date (or 20% into class duration): 01/31/22*
- *Last Day to file P/NP (only courses where this is an option) 02/11/22*
- *Lincoln's Birthday (all campuses closed): 02/18/22*
- *Presidents Day (all campuses closed): 02/21/22*
- *Last day to petition to graduate or apply for certificate: 03/03/22*
- *Spring Break (no classes): 03/14/22-03/19/22*
- *Last day for student-initiated W (no refund): 04/01/22*
- *Last day for faculty-initiated W (no refund): 04/01/22*
- *Final examinations: 05/07/22-05/13/22*
- *Semester ends: 05/13/22*
- *Grades available for transcript release: approximately 05/30/22*

## Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

## Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

## Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

## Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the [Student Information Update form](#).

## Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8 digit birth date

For tech help, email [its@redwoods.edu](mailto:its@redwoods.edu) or call 707-476-4160

Canvas Help for students: <https://www.redwoods.edu/online/Help-Student>

Canvas online orientation workshop: <https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources>

## Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Health & Wellness website](#).

[Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email [counseling@redwoods.edu](mailto:counseling@redwoods.edu).

# Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones. Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor <https://webadvisor.redwoods.edu> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or [security@redwoods.edu](mailto:security@redwoods.edu) if you have any questions. For more information see the [Redwoods Public Safety Page](#).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

## Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [Redwoods Public Safety Page](#). It is the responsibility of College of the Redwoods to protect life and property from the effects of emergency situations within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
2. Dial 911, to notify local agency support such as law enforcement or fire services.
3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

## Student Support Services

The following online resources are available to support your success as a student:

- [CR-Online](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

Special programs are also available for eligible students include

- [Extended Opportunity Programs & Services \(EOPS\)](#) provides financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- The [Veteran's Resource Center](#) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

*This syllabus is subject to change at any time....I will let you know.*