



## Syllabus for FNR-80 Introduction to Watershed Management

### About this Class:

#### Course Information

**Semester & Year:** Spring 2023

**Course ID & Section #:** FNR-80-E5124

**Instructor's name:** Liz Houghton

**Day/Time of required meetings:** Monday 1:15 to 4:25

**Location:** AT106

**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.

## Hybrid course organization

### Online

This is a hybrid course. This means part of the work will be done online in Canvas and part of the work will be done on Mondays in a three hour lab period. You are required to meet on Mondays and to complete the online component by the due dates.

### Weekly Plan

Assignment	Due Day/time each week
Watch lecture videos take online quizzes	Sunday by midnight
Read material provided write responses to questions	Sunday by midnight
Lab write-up	Friday by midnight

### Lab

Labs will mainly be conducted outside in the McKay Community Forest in Eureka. You will be responsible for your own transportation. Carpooling is encourage and I am happy to drive anyone from CR to the sight. Please to be sure to where appropriate clothing: sturdy shoes or boots, rain gear (if needed), warm layers, snacks and water. More information on where and when to meet will be provided each week

## Evaluation & Grading Policy

- Your final grade will be calculated based on the grade in the canvas gradebook and overall participation and involvement in the 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

- The lecture portion of the course is 40% of your grade and the lab is 60%. Attending and completing lab material is the most important part of the course. To be successful do all the work to the best of your ability.

Course category		Percent of total grade
Online lecture		
Weekly quizzes	10%	40%
Reading response	10%	
Exams	20%	
Lab		60%
Lab Exercises/write-ups	25%	
Ryan summary report	20%	
Final	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 Lecture Quizzes (10% of total grade). After watching each lecture video there will be a short quiz. The purpose of these quizzes is to check your understanding of the lecture videos. These are due on Sunday night (11:59 pm)

- 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 Monday. The reading responses are due on Sunday night (11:59) each week. These are short answer to no more than five questions and again help me to know how prepared you are for the weekly lab.

- Lab write-ups (25% 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 thorough report based on the prompts provided in Canvas. These reports will be submitted through Canvas and are due on Friday (11:59) each week.

- Exams (20% of total grade)

This course is divided into three sections: Watershed description, Hydrologic processes and Watershed management. There will be exams after each section (2 for sure, one may be part of the final). These exams will be provided through Canvas. You will be given a specified amount of time to complete each.

### Make-up and Absence Policy

- In general there are no make-ups for missed lab **activities**
- Planned and unplanned absences should be communicated to your instructor and some consideration for emergencies and sickness will be considered in making up work

### 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	Assignments
1	1/16	No class; School Holiday	Online quizzes and reading responses Due Sunday night each week  Lab Exercise write-up due Friday
2	1/23	What is a watershed?	
3	1/30	Watershed characterization: Location, Vegetation, topography	
4	2/6	Watershed Characterization: Geology and Soils	
5	2/13	Hydrologic cycle and processes	
6	2/20	No Class; School Holiday	<b>Due:</b> Exam 1: Watershed description
7	2/27	Hydrologic processes: Interception and evaporation	Online quizzes and reading responses Due Sunday night each week  Lab Exercise write-up due Friday
8	3/6	Hydrologic processes: Infiltration and soil water movement	
9	3/13	<b>Spring Break</b>	
10	3/20	Hydrologic processes: Groundwater	Online quizzes and reading responses Due Sunday night each week  Lab Exercise rite-up due Friday
11	3/27	Streamflow	
12	4/3	Watershed management issues	<b>Due Exam 2:</b> Water droplet through a watershed due
13	4/10	Erosion and roads	Online quizzes and reading responses Due Sunday night each week  Lab Exercise rite-up due Friday
14	4/17	Water Quality	
15	4/24	Fish life cycle and management	
16	5/1	Social aspects of watershed management	
Final	5/8	Final: 8:30 to 10:30 or TBA	<b>Ryan Creek Summary due</b> <b>Final will focus on watershed management issues</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 2023 Dates

- *Classes begin: 01/14/23*
- *Martin Luther King's Birthday (all campuses closed): 01/16/23*
- *Last day to add a class: 01/20/23*
- *Last day to drop without a W and receive a refund: 01/27/23*
- *Census date: 01/30/23 or 20% into class duration*
- *Last day to petition to file P/NP option: 02/10/23*
- *Lincoln's Birthday (all campuses closed): 02/17/23*
- *President's Day (all campuses closed): 02/20/23*
- *Last day to petition to graduate or apply for certificate: 03/02/23*
- *Spring Break (no classes): 03/13/23 – 03/18/23*
- *Last day for student-initiated W (no refund): 03/31/23*
- *Last day for faculty-initiated W (no refund): 03/31/23*
- *Final examinations: 05/06/23 – 05/12/23*
- *Commencement: 05/15/23*
- *Semester ends: 05/12/23*
- *Grades available for transcript release: approximately 05/26/23*

## 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

In Canvas, you should be able to find this course with all the navigation tools explained. This course follows weekly modules and these are linked on the Canvas page. Please do not hesitate to contact me for help, questions or concerns. Be sure to check into Canvas daily for weekly messages and reminders.

Log into Canvas at [My CR Portal](#)

For help logging in to Canvas, visit [My CR Portal](#).

For help with Canvas once you're logged in, click on the Help icon on the left menu.

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

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](#)

## 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

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful

## 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.*