

Course Information

Semester & Year: Fall 2020

Course ID & Section #: FNR-52-E0260

Instructor's name: Dr. Tim Baker

[if synchronous] Day/Time of required meetings: M/W 10:00am-11:00am lectures (online) M/W 11:30-3:00 labs

[if in-person] Location: Labs — outside of AT 107A (tool room)

[if needed] Number of proctored exams: 0

Course units: 4

Instructor Contact Information

Office location or *Online: Online through Canvas or direct email at Tim-Baker@redwoods.edu

Office hours: W 10-11am and by arrangement

Phone number: 476-4348 (voice mail)

Email address: Tim-Baker@redwoods.edu

Catalog Description

An introduction to the various techniques for planning and conducting land surveys. Lab exercises progress from compass and pacing through the use of Total Stations. Basic mapping exercises are conducted using field data. Discussions cover the theory of surveying, associated math principles, and the various methods of legal property description.

Course Student Learning Outcomes *(from course outline of record)*

1. *Solve basic land surveying problems.*
2. *Read, and use various kinds of maps and boundary descriptions.*
3. *Labs Specific Outcome: Use basic surveying equipment to gather appropriate field data.*
4. *Lab Specific Outcome: Analyze field data and generate appropriate maps and reports.*

Prerequisites/co-requisites/ recommended preparation

[If applicable]

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, 1st 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.

Support for online learners during COVID-19

In response to COVID-19, College of the Redwoods moved the majority of its courses online to protect health and safety. As the faculty and students adjust to this change, clear communication about student needs will help everyone be successful. Please let me know about any specific challenges or technology limitations that might affect your participation in class. I want every student to thrive.

Evaluation & Grading Policy

Module quizzes	20%
Problem sets	20%
Final Exam	10%
Lab assignments	35%
Final field project	15%

Late assignments will be penalized. Module quizzes will have deadlines after which the quiz can't be taken.

Admissions deadlines & enrollment policies

Fall 2020 Dates

- *Classes begin: 8/22/20*
- *Last day to add a class: 8/28/20*
- *Last day to drop without a W and receive a refund: 9/4/20*
- *Labor Day (all-college holiday): 9/7/20*
- *Census date: 9/8/20 or 20% into class duration*
- *Last day to petition to file P/NP option: 9/18/20*
- *Last day to petition to graduate or apply for certificate: 10/29/20*
- *Last day for student-initiated W (no refund): 10/30/20*
- *Last day for faculty initiated W (no refund): 10/30/20*
- *Veteran's Day (all-college holiday): 11/11/20*
- *Fall break (no classes): 11/23/20-11/28/20*
- *Thanksgiving (all-college holiday): 11/25/20-11/27/20*
- *Final examinations: 12/12/20-12/18/20*
- *Semester ends: 12/18/20*
- *Grades available for transcript release: approximately 1/8/21*

Students who have experienced extenuating circumstances can complete & submit the **Excused Withdrawal Petition** to request an Excused Withdrawal (EW) grade instead of the current Withdrawal (W) or non-passing (D, F & NP) grades. The EW Petition is available from the Admissions and Records Forms Webpage. Supporting documentation is required.

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 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.

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 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

General Course Information

Course structure: The course for Fall 2020 is built around online lectures and discussions with **In-Person** labs combined with some **Virtual** labs. The lectures will be through Zoom with the material recorded and available for asynchronous review. The In-person labs will be held on campus outdoors following College COVID-19 policy. Masks are required as is screening. The Virtual labs will be on-line open forums to help you with map-making, processing data, or completing at-home surveying projects.

Drop Policy: You may be dropped from the class if you miss 3 or more labs or fail to complete 2 or more Module quizzes before the 10th week of the semester.

Field Equipment: Masks must be worn during labs! You will need appropriate clothing and closed-toe footwear for the conditions. A field notebook (Rite-n-Rain Transit field book), and whatever miscellaneous items you need (e.g. sunscreen, bug repellant, water, etc.). You will also need various drafting supplies including 8x8 or 10x10 graph paper, pencils, rules or straight edges, drawing compass, and guides. **A calculator with trig functions is essential.**

Texts: Surveying 6th Edition by McCormac et al. (ISBN 978-470-49661-9)

Course objective: You will be introduced to the basic concepts of surveying and mapping through a combination of classroom discussions and field exercises. The major concepts include the use of trigonometry, compass, levels, transits, tapes, and Total Stations. The dominant surveying and mapping systems will be introduced but we will not cover all the legal aspects of boundary surveys.

Topics should include:

- History and background of surveying
- Surveying units, terms, and definitions
- Plane vs. geodetic surveys
- Topographic surveys
- Leveling
- Coordinate systems
- Using trigonometry and geometry to solve surveying problems (traverse calculations)
- Boundary descriptions including the Public Land Survey System
- Geographic Information Systems and Global Positioning System overview
- Deeds and records searches

Final Project:

During the last 4 weeks of the semester (depending on weather), each student will participate in a small-group surveying project. This semester teams of 2 or 3 will choose a project location on campus in consultation with the instructor to conduct a comprehensive survey using the techniques covered in class. The final project has multiple products: 1) Executive Summary (3-5 pages) which provides the details of the project as well as the methods and equipment, data analyses, and any problems encountered; 2) a large (approximately 24" x 36") map of the project with appropriate labels and legends, 3) complete data analysis of precision, area enclosed, with a goal of exceeding 1:10,000 precision, and 4) field data notebook and sketch map.