



Syllabus for Intro to Geospatial Concepts

Course Information

Semester & Year: Spring 2022

Course ID & Section #: FNR-31-V3114 (053114) Intro to Geospatial Concepts

Instructor's name: Valerie Elder

Optional Face-to-Face/Live Zoom meetings: Mondays 6:00 PM-8:30 PM * subject to change*

Demonstrations will be recorded and shared.

Location: AT 107 or Virtual/Zoom

Course units: 3

Instructor Contact Information

Office Hours:

Monday mornings 9-11 AM ([Online via Zoom](#): password: treesrcool) or In-person (AT 134)

Monday evenings 6-8:30 PM (Online see Tech Connect Zoom link in Canvas) or (AT 107)

* or email me or Pronto message me for an appointment*

Pronto. I will answer M-F 10-4, feel free to send and I will respond as soon as I can.

Email address: Valerie-elder@redwoods.edu

About the Class:

Geospatial Concepts serves as a gateway course for the remainder of the Geospatial Curriculum, particularly, Geographic Information Systems, and Remote Sensing. As such, we will cover the history and fundamental concepts common among all the geospatial sciences, including scale, coordinate systems, geographic data acquisition and use, global positioning systems (GPS), geodesy, cartography, remote sensing and geographic information systems (GIS). The course also covers the introductory material and practices unique to each geospatial discipline that follows. The result is an information-dense course that establishes a secure footing moving forward. We will work through these topics from both a historical and cultural context, as well as contemporary applications, to develop a strong foundation in spatial science.

Catalog Description

An introduction to geospatial concepts. Students will learn the theory and application of GPS technology, cartography, GIS software, and remote sensing techniques.

Course Student Learning Outcomes (*How do I know I'm learning?*)

At the end of this course, you'll be able to:

- Discuss acquisition and utilization of geospatial data from various sources and integration into geographic information systems.

- Discuss common geospatial characteristics of maps including projection systems, landmarks and features, scales, and frame of reference.
- Analyze strengths and weaknesses of global positioning system (GPS) data and discuss basic operational parameters of the various systems in current use.
- Lab Specific Outcome: Use software to develop maps from data acquired from various sources.

How does this course work?

FNR31 is offered as a 16-week course through College of the Redwoods (CR). This course was adapted from the Humboldt State University (HSU) GSP 101 Geospatial Concepts course. This partnership between CR and HSU creates a streamline path for students who plan on transferring to a four year institution. In addition to easy transferability, the skills learned in this course will prepare any student to move forward with their education in Geographic Information Systems.

This semester FNR31 is fully online, and will be mostly asynchronous. An asynchronous course means that there will be no set times that you need to be online, but you will still have due dates, and should make a work plan that suits your schedule in order to meet course deadlines. There are elements of this course that will be synchronous, but optional. For example, each week there will be an 'open lab' scheduled through zoom where the instructor will be conducting a lab demo if necessary and be available to help with lab assignments. We will have office hours offered in the computer lab and tutoring available. Additionally, there will be periodic guest lecturers. The instructor will give two weeks advanced notice of these guest lectures so students will have ample time to prepare to be available during that time frame. If you are not able to attend, you must contact the instructor in advance of your absence.

Everything happens within this Canvas course - course materials and course communications will be posted to Canvas. Assignment submission and grades will occur there as well. It is recommended that you use the Chrome or Firefox browser to view and participate in the course. Any changes to the schedule will be posted in the Announcements section. Make sure you are checking (and emailing from) your CR email, and that your preferences are set to receive notifications, as messages will be sent there (see below for more information).

Getting Help/Virtual Office Hours

Your instructor will be able to assist you in a variety of ways. Please do not wait until the end of the semester if you are struggling with concepts or skills. This information is cumulative, and your future success depends on your current comprehension.

1. Contact me or your peers using the pronto group. All of us, and your peers, will use this similar to asking questions in class. Do a search first (Google is your friend!), and if you don't find your question, post it to the discussion group in pronto. If you solved it on your own, or see another post to which you know the solution, you are encouraged to post feedback to help each other, so that we are sharing knowledge within the community.

2. Check for Office Hours. Office hours, virtual for this course, are specifically to assist you with questions or concerns. Office hours are by appointment and may be set up via zoom by contacting the instructor, so be sure to check the homepage, syllabus or announcements for more information.

3. Email your instructor. If you have a question about grades, or other personal or confidential matters, you should always use email to contact your instructor. Always email them directly (links are on the home page), and always from your CR account.

Canvas Announcements

From time to time, class announcements will be sent out via the CR Canvas Learning Management System. It is your responsibility to make sure your **personal settings** ([Links to an external site.](#)) in Canvas **are set to receive email notifications** about these announcements. You can also review previous announcements by clicking Announcements in the navigation pane.

Course Text

Geospatial Concepts (2021): The Fundamentals of Geospatial Science

Authors: Nicolas Malloy and Amy Rock

Edition: ISBN: 9798577591878

The preferred platform for this text is the Free PDF or the e-book provided through Kindle. The other ebooks will be just as good and easy to navigate to the readings and activities on your own. The ebook versions allow for more of an interactive experience where the students are able to read through course material, watch videos, and follow class lab assignments. There are other beneficial features such as highlight and note taking. The e-books are around \$9.99 and very affordable; though there is a free PDF version that can be used, but won't have the same quality of inter-activeness as the e-book. If you decide to purchase the paperback, you would still need access to the videos and lab activities.

We also have tablets- available for checkout from the CR library for the semester if you want to view the PDF on a tablet rather than toggling screens. Personally that works better for my learning style and lab directions are in the textbook so it's nice to follow along seamlessly.

- Link to Amazon Kindle Text/ or paperback: [Geospatial Concepts 2, Malloy, Nicolas, Rock, Amy - Amazon.com](#)
- Link to free PDF from HSU Free Press: ["Geospatial Concepts, Second Edition" by Nicolas R. Malloy M.S. and Amy Rock Ph.D. \(humboldt.edu\)](#)
- [Link to Google Book](#)

Additional readings may be provided or assigned, in the form of materials available freely online or through the HSU library.

Technical Requirements

As this is an online course, you already know you need reliable internet access (broadband or DSL) and a browser installed on your computer. If you encounter problems with their internet connection while working on this course, it is their responsibility to find an alternative internet access point, such as a public library. The Chrome browser is the recommended browser for interacting with the course.

Note: Cookies and JavaScript must be enabled. Pop-up blockers should be configured to permit new windows from the Geospatial Institute and CR websites. ***Other browsers, such as Safari, Edge, and Microsoft Explorer are not recommended for this course.***

If you do not have a personal computer please refer to the College of the redwoods online support page, call 707-476-4260 or email library-circulation@redwoods.edu.

Additionally, if your computer is not compatible with the GIS software there is potential virtual lab access. The instructor will announce how to access the virtual lab for those students who require it. The virtual lab has limited space and will be reserved for students who do not have access to a personal computer that is capable of handling course software and materials. If you think that you may need access to the CR virtual lab, please contact the professor during the first week of the course.

Students working from personal computers that do not need the CR virtual lab are required to install or have access to the following software:

- ArcGIS Desktop Student Edition (ArcGIS student licenses are available for all students currently enrolled in a geospatial class.) YOU MUST EMAIL THE INSTRUCTOR OF THE COURSE WITHIN THE FIRST WEEK OF CLASS TO RECEIVE YOUR PERSONAL ACTIVATION CODE. This is extremely important because currently CR has an extremely limited virtual lab, and students will need to run the ArcGIS software from their personal computers to be able to participate in this course. IT IS REQUIRED.
- 7-Zip (7-Zip (Links to an external site.) is a free, open-source file compression/decompression utility) Installing 7zip on Windows 10 (Links to an external site.)
- Microsoft Office (Links to an external site.)
- Adobe Acrobat Reader (Links to an external site.)
- Zoom (Links to an external site.)

Additional requirements if you are using your own computer:

- Operating System Windows 7, Windows 8/8.1, 10 or higher
- Processor 2 GHz or higher
- Memory 8 GB of RAM
- Graphics Card NVIDIA or AMD is required to work properly with some of the ESRI ArcGIS extensions.
- Hard Drive Space 60GB free disk space
- Plug-ins Adobe Reader [Download from Adobe]

Additional Software: Java 1.7 or later (<https://java.com/en/download/>), Adobe Acrobat Reader
Speakers Required (or headphones), Monitor Capable of at least 1024 x 768 resolution

Accessing the Software

Because of the transition to online instruction, access to software is the responsibility of individual students. If you will be working in the field, or other environment with intermittent internet access, please contact your instructor about other methods for acquiring the requisite course software.

Computers on Campus

Because of the need for social distancing and safety, lab policies and access have changed. Watch for announcements on the canvas course page for updates. There is potential virtual lab access, and the instructor will announce how to access the virtual lab for those students who require it. The virtual lab has limited space and will be reserved for students who do not have access to a personal computer that is capable of handling course software and materials. If you think that you may need access to the CR virtual lab, please contact the professor during the first week of the course.

Prerequisites/co-requisites/ recommended preparation

Students will be required to have access to adequate computer and internet access and familiarity with basic computer skills. Examples of this include:

- navigate a class in Canvas
- receive, respond and regularly check) messages sent to your CR email account
- receive, respond and regularly check) announcements sent in Canvas
- download and upload files in Canvas assignments
- use a phone or digital camera (or webcam) to upload “selfies” to your online lab notebook
- use a word processor program (such as Microsoft Word or Google Docs)
- use a webcam or a phone to record and upload videos in Canvas
- use Zoom, email and canvas discussion boards to communicate with peers and instructor

COVID Safety Protocols:

Campus safety protocols can be found here:

https://www.redwoods.edu/Portals/0/Covid/Student_quickfact_SP22.pdf

Student Responsibilities include:

- Facial coverings are mandatory in all indoor spaces and outdoors where 6 feet of social distancing is not possible, including walking to and from classes.
- Upload vaccination status (one-time) in the College of the Redwoods Campus App; OR
- If un-vaccinated (with exemption**), complete daily pre-screenings in the Campus

App or with a health screener on campus.

- After completing the health screening, receive a pass through the Campus App OR a wristband from a health screener.
- Use QR codes and the Campus App to scan into classrooms and other areas for contact tracing purposes.

Accessibility

College of the Redwoods is 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

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Student Support

Good information and clear communication about your needs will help you be successful. Please let me 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.

Evaluation & Grading Policy

Examinations and assignments are listed in Canvas, and in the course outline below, and are **subject to change**. Changes will be announced in class, and posted in Canvas – due dates in Canvas should be considered the most current. Additional assignment due dates will be announced when the assignments are given. You are responsible for knowing when your work is due.

Your grade will be composed of online discussions (20%), quizzes (10%), lab activities (40%) and exams (20%). The remaining 10% will be a participation/professionalism component. This component will be based on your level of engagement and interaction with your instructors and peers during the course. Assignments will be graded typically within one week of submission, depending on instructor workload. You will be able to track your grade throughout the course via the Grades section in Canvas.

Late Policy

Deadlines are a necessary part of life, and as the information in this course is foundational and cumulative, it is important to complete your assignments on time so that you're ready for what comes next. Because of the amount of work necessary in this course and that the work is cumulative, each module needs to be completed in order for the next module to open up. This means if you have not completed everything in module one, the upcoming module two will remain locked until all the work is submitted. Each week, you will typically have a quiz, a discussion, a pre-lab and a lab assignment due. Be sure to check the Canvas calendar or the bottom of the Syllabus page for due dates. Canvas also has options for [setting reminders](#) ([Links to an external site.](#)) for your to-do list.

Late work will be penalized 10% for being for up to a week after it is due. Assignments are due at the set due date AND time. It does not matter if the assignment is one minute late or a week late the penalty will be applied. After a week the assignments will be closed and the student will receive a 0. In this case, the only way to receive credit is to contact the Instructor and it will be situational whether or not those points can be made up. Exams and quizzes may not be submitted late or made up without an excused absence.

If you experience computer issues, or an internet or power outages (such as from weather or a downed line in your neighborhood) while working from home, you should seek other alternatives such as a local library to complete your work. In the case of a campus-wide or community-wide outage, deadlines will be adjusted (such as Mass outages for fire safety).

Exceptions to this policy will only be granted in the event of legitimate excused absences. An excused absence means that you have a) notified your instructor in advance and received confirmation from them that your notice has been accepted or b) provided a written medical excuse. You must still make arrangements to take the test, and our willingness to be flexible improves with the amount of advance notice we receive. Plan your travel and personal events around your school work, not vice versa. Failure to be aware of exam dates because of class absence does not constitute an excuse – any changes will be posted on Canvas.

Due to some unpredictable variables related to COVID-19, please discuss late or missing work and absences with me. I want you to be successful and I can only help if you communicate with me.

Meeting Minimum Requirements

Minimum requirements represent the minimum amount of work needed to earn a grade. Students who submit incomplete work, or do not meet the minimum requirements regarding length and content, will be given a zero grade for the assignment.

Expected Work Load

The expected workload for CR Courses is calculated at 3 hours per week for each unit in a standard 16-week course. For the combined lecture and lab, this amounts to nine hours per

week. This may be more or less hours depending on your learning style and inevitable technical challenges with internet/software etc.

CR Grading Scale: A: 94-100, A-: 90-<94, B+: 87-<90, B: 84-<87, B-: 80-<84, C+: 77-<80, C: 70-<77, D: 60-<70, F: <60

Drop Policy: You may be dropped from the class if you miss 3 or more weeks of class participation, discussion, assignments or labs prior to the end of week 10. If you stop participating in class after week 10 you will be graded for participation and may receive an F.

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. This 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://webapps.redwoods.edu/tutorial/>

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.

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 emergencies 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 services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- 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

Inclement Weather

In case of weather-related delays at the University, online portions of this course will proceed as planned. Your instructor will inform you if there are any extenuating circumstances regarding content or activity due dates in the course due to weather delays. If you are affected by a weather-related emergency, please contact your instructor at the earliest possible time to make special arrangements.

All course materials students receive, or to which students have online access, are protected by copyright laws. Students may use course materials and make copies for their use as needed, but unauthorized distribution and uploading of materials without the instructor's express permission is strictly prohibited.

Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the College of the Redwoods Code of Conduct, and liable under Federal and State laws.

Disclaimer

The specifics of this Course Syllabus can be changed at any time, and you will be responsible for abiding by any such changes. Significant changes to the syllabus will be communicated to you via Canvas announcements.

Course Schedule

The course schedule is posted to Canvas, and is subject to change. Please see Canvas for the most current version.