Introduction to Remote Sensing

ENVS/ GEN/ GEOG/ GEOS/ GIST/ WSM 330

Online course home (https://d2l.arizona.edu/d2l/home/1174105)

DESCRIPTION

Introduction to Remote Sensing introduces students to the modern field of remote sensing with an emphasis on how to use satellite imagery to monitor environmental change, such as urban growth, flood events, agricultural production and deforestation. This course covers a broad range of remote sensing topics including theory, data acquisition, analysis and applications. We will use both public and commercial satellite data- and both optical and radar data too. The multidisciplinary nature of remote sensing has important and far-reaching applications that span the environmental and social sciences. Thus, all of the principles, techniques, and applications of remote sensing cannot be covered in depth during one semester. But this course will provide an overview of remote sensing principles/applications and give students the background and training needed to understand and utilize satellite image data and be prepared for more advanced work in image analysis. Note that we will be using the Google Earth Engine platform for all image analysis and computer programming (coding!) in Javascript for every lab. This course is cross listed as GEOG 330, ENVS 330, GIST 330, GEOS 330, GEN 330, and WSM 330.

STUDENT LEARNING OUTCOMES

Upon completion of the course, students who excel are able to:

- Construct and execute remote sensing workflows using remotely sensed data in the cloud in a programming language (using Google Earth Engine and Javascript)
- Explain how remote sensing can be used to monitor human-environment change
- Use conceptual critical remote sensing skills to understand how satellite data can **expose** social and environmental injustices and inequalities, be integrated to **engage** with local communities and their forms of knowledge, and **empower** or disempower historically marginalized peoples.

- Apply acquired knowledge and critical thinking skills to address real-world problems with appropriate remote sensing data and processing methods

PREREQUISITES

No prerequisite courses are required. Some knowledge of basic algebra is assumed.

Class Anti-Discrimination Policy

“As a classroom community, our capacity to generate excitement is deeply affected by our interest in one another, in hearing one another’s voices, in recognizing one another’s presence.” — bell hooks, Teaching To Transgress: Education as the Practice of Freedom

I encourage you to bring your whole self to the classroom, and to actively make the classroom a respectful place so that others can bring their whole selves if they desire to do so. We will learn more by welcoming a diversity of perspectives and life experiences. Creating a respectful space and being anti-racist is an intentional act. Racism, discrimination, and microagressions will not be tolerated. If you feel another student, TA, or the instructor has done or said something disrespectful to you or others please let me know to address the issue. You may also say “oops” or “ouch” if something says something you feel is disrespectful during class to let them know. If you unintentionally make a comment that may feel like a microaggression, racist, or disrespectful, and someone points it out, I invite you to gratefully accept the learning experience.

Land Acknowledgement

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. The University of Arizona has financially benefited from at least 184,000 acres of expropriated Indigenous land which was not paid for and resulted in raising over $576,000 for its endowment in 1910 from Apache, Pima, Maricopa, Navajo, Walapai, Cocopa, and Tohono O’odham* Tribes- see: https://www.hcn.org/issues/52.4/indigenous-affairs-education-land-grab-universities for more and download the university land grab data here: https://github.com/HCN-Digital-Projects/landgrabu-data.
*The data uses the term “papago” for the Tohono O’odham but this is a derogatory term the Spanish used, and thus I am using the updated term that the O’odham people prefer is used

INSTRUCTORS

Lead Instructor

Dr. Beth Tellman
Assistant Professor,
School of Geography, Development & Environment
Office: ENR2 S522
Email: btellman@arizona.edu
Office hours: By appointment, just email (see notes below)

Teaching Assistant/ Lab Instructors

Ariful Islam
PhD Student
School of Geography, Development, and Environment
Email: ariful@arizona.edu
Lab assistance office hours: Monday 10-11am in person, s472 in ENR2

Kurt Von Ohlen
Master's in Development Practice (MDP)
School of Geography, Development & Environment
Email: kurthillvonohlen@arizona.edu
Lab assistance office hours: Wednesday 3:00 - 4:00pm (see below or D2L for Zoom link)

Course email address: introremotesensing-fall2022@list.arizona.edu

MODE OF INSTRUCTION

This class is scheduled to be taught in-person. The course structure including lectures, lab sessions and office hours is as follows:

Lectures
Tuesdays and Thursdays, 2:00 - 2:50pm, Gittings Building, Room 201

Labs (In-person, ENR2 Rm S547)
Sec A: Wed, 10-10:50am
Sec B: Wed, 11-11:50am
Sec C: Fri, 10-10:50am
Sec D: Fri, 11-11:50am

Office-hours
Monday 10:00 – 11:00am (Ariful Islam)
Rm S572 (In-person)

Wednesday 3:00 - 4:00pm (Kurt Von Ohlen)
Zoom: https://arizona.zoom.us/j/85662995075 (waiting room enabled; see D2L calendar)

Expectations for in-person activities: For all in-person interactions, students and instructors are required to adhere to the Health & Safety Policies outlined later in this syllabus. ***This includes encouraging wearing a mask in the classroom or computer lab and staying home in the case of any COVID-19 symptoms*.**

Lab sessions: Students should attend the formal lab session in which you are registered. To start the semester, lab sessions will initially be held in-person. The scheduled room for labs (ENR2, Rm S547) has a capacity of 40 students. Mask wearing is encouraged but not required.

Please do not join a lab session in which you are not registered without prior approval from an instructor so that we can manage the number of participants in each session. Most (but not all) labs are designed such that you can complete the computer portion of the work during that slot. Later in the semester the labs increase in length and difficulty, and some will require you to work outside of the lab sessions – this can be done independently on your own. We have scheduled additional time outside those formal lab sessions called “lab assistance office hours”. We prioritize helping students who attended the regularly scheduled lab sessions. We cannot ensure assistance in open lab hours if you did not attend your respective lab session according to UA’s policy concerning attendance and class participation.

Special notes about lab sections: It is important to arrive on time for lab sections. Labs involve working through a variety of technical steps and if you are late, you will miss the setup and initial steps. We need to keep the labs moving quickly (they're only 50 minutes) and so it's not possible to stop a lab to help late students catch up to where we are in the labs. It's not that we don't want to be helpful - it's just that we would have to hold up the entire lab to help late students catch up.

Remain flexible: If pandemic conditions warrant, the University may require that we return to fully remote operations. If that is the case, we will notify you by D2L Announcement and email that we are moving to remote operations.

COURSE COMMUNICATION

Students should send emails to introremotesensing-fall2022@list.arizona.edu to receive the quickest response. Emails sent to introremotesensing-fall2022@list.arizona.edu will be seen by all instructors and thus increase the chances of a prompt reply. We will try to respond to emails within 24 hours during the week.

Please send *most* correspondence to the course email address. All members of the instructor team will become aware of your issue and you will receive the fastest response. If you miss class due to illness or have a family emergency that means you will miss an assignment send an email to the course email list so that if an extension is granted all instructors for the course are aware. However, if there is ever anything sensitive or something you feel uncomfortable sending to the course email address do feel free to email Dr. Tellman directly.

Office Hours: To meet with Dr. Tellman, just send an email to arrange a time. In almost all cases it is possible to arrange a meeting within the 3 days.

We will also hold open office hours on Zoom (see Teaching Assistant/ Lab Instructors). If you plan to attend these office hours, please join/arrive at the beginning of the session. In the case of no attendance within the first 15-minutes, the TA will not staff the entire duration and may leave if nobody has shown up.

In addition to these office hours you can always email us to arrange to meet so the lab hours and open office hours are certainly not the only way to get help from us.

Technical support: We will help with technical issues via emails sent to introremotesensing-fall2022@list.arizona.edu. If you are emailing because of an Earth Engine error message you received, include a screenshot or verbatim text of the message, and generate a link to the code and send it in the email as this helps us diagnose what the problem is. Before you write an email, spend at least 10 minutes trying to solve the problem yourself, using the following resources:

1. Earth Engine Developer guide https://developers.google.com/earth-engine/guides
2. Searching for your question on the Stack Exchange https://gis.stackexchange.com/questions/tagged/google-earth-engine
3. Search existing script examples on earth engine or sign up for the developer's forum to search. More information here: https://developers.google.com/earth-engine/help

Communication: All emails to us should come from your UA-ID's/email accounts. Messages sent from non-UArizona email addresses (Gmail, Yahoo, other…) may end up in our spam/junk folders. When you send emails from your UofA email address it enables us to recognize you as a student in the course. Be sure to check your UA-email account and the Announcements course page on D2L regularly so you don't miss any important information.

COURSE MATERIALS, SOFTWARE & EQUIPMENT REQUIREMENTS

In order to take this course, you will need access to a computer and regular access to a reliable internet signal, which are available on campus. In addition, you will need to have the required course materials and an active UA Net ID and Password which are used to access the following online course resources.

Required Texts or Readings: We will mainly be using the textbook Earth Engine Fundamentals and Applications - EEFA for this course. Other reading materials will be posted via D2L (downloadable PDFs).

Software: Google Earth Engine

GEE is a cloud-based platform that we will use to work with large amounts of remote sensing imagery. You will need to sign up for an Earth Engine account to participate in this course (see Lab 0 for instructions). All you need is an internet browser and connection. You can use your own laptop or computer, or any lab on campus such as:

Main Library
Science-Engineering Library

Fine Arts Library

All students are required to use Microsoft Office 2010 or greater to compose your lab assignment submissions. Word, Excel and Powerpoint will be the main software tools to write lab reports and solve problem sets. All University of Arizona students have automatic access to Microsoft Office software through the UA library. Students may upgrade their systems, download the new software and access how-to instructions at: http://uabookstore.arizona.edu/technology/campuslicensing/default.asp

Compression Software: You will need a file utility capable of file compression to open and save .zip and .tar.gz files. 7-Zip can be downloaded for free from http://www.7zip.org (link is external).

Use of Software: In this course you are provided with access to both software and data. Due to licensing restrictions, the software and data are only for use associated with this course.

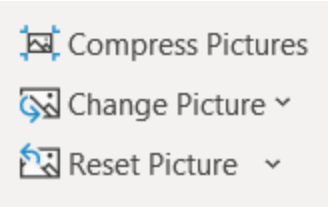
Data sharing resources: Data related to labs or other assignments will be posted on Google Drive or the D2L site so all students can download lab related data sets.

Accessing Google Drive: *During the first week of class ensure you are able to access Google Drive services through your UofA account.* Note that logging into Google Drive via your UofA account (@arizona.edu) will give you access to files that you do not have access to if you log in through a personal Gmail account.

Uploading assignments to D2L: It is your responsibility to check D2L to ensure you have uploaded the correct lab assignment – after you upload your assignment you can preview that document to double check you have uploaded the correct document. The D2L system also will give you confirmation when you upload your assignment (that you can save). In order to be fair to other students, we can't accept late submissions in cases where a student indicates they mistakenly uploaded the wrong file.

Uploading images to D2L: Some lab assignments require you to insert images (often screen captures/grabs) into the documents you submit to D2L. When you insert images into MS Word documents the file size may be very large depending on the resolution of the images you insert. You can reduce the size of your MS Word documents by compressing the images you've inserted. You can do this by following these steps (actual steps may vary slightly depending on your version of MS Word):

1. Open your document in MS Word,
2. Double click on any image you have pasted into your file,
3. If the "Picture Format" tab is not automatically selected, click on that tab,
4. Click the "Compress Pictures" icon



A dialog box will open.

5. Select “On-screen (150 ppi)” in the pull-down menu,
6. make sure the “All pictures in this file” radio button is selected,
7. Click OK,
8. From the main MS Word menu save your document making sure it is being saved as a *.docx file. This will usually decrease the size of your MS Word documents.

The maximum size of files that can be uploaded to D2L is 1GB which is larger than files you will create this semester provided you follow lab instructions. D2L may exhibit slow response when you upload large file sizes but by reducing the size of your MS Word documents using the steps above you should be able to successfully upload your documents.

It is your responsibility to upload your files to D2L by the stated deadlines. Because network conditions or other services can experience technical difficulties, it is important to try to upload your assignments with enough time to resolve any uploading problems. If you experience an error message when uploading your documents to D2L or other technical problems follow these steps:

1. Take a screenshot of the error message
2. Contact D2L support using one of the following mechanisms:
    a. Email: d2l@email.arizona.edu
    b. Phone: 520-626-6804
    c. Visit the D2L office at the Manuel Pacheco Integrated Learning Center, Room 103

Saving your work to D2L: *It is your responsibility to save your work after each work session*. If you are unfamiliar with saving your data to cloud services (e.g. Google Drive, Box, Dropbox) you will need to practice uploading/downloading files and folders early in the semester to ensure you do not have any instances of data/file/work loss during the semester. This is a fundamental skill when working with data. To be fair to other students, we can’t accept late assignments resulting from data/file/work loss. This is because it’s impossible for us to differentiate between students who actually experienced data loss from those who are insincere.

Data loss does happen, but just use these practices to minimize the chances that it precludes submission of your work:

1. if you use a thumb drive/USB key make sure you copy it to a 2nd location frequently (because it's so easy to lose or leave behind a USB key),
2. Use cloud services for copies of your data – zip up your working folders and store them on Google Drive or Box (free for student use),
3. frequently save your MS Word documents and ArcGIS Pro sessions as you work.

COURSE ORGANIZATION

The course will be organized around key remote sensing topics, which are built around one-week modules. We have designed these modules for students to first learn fundamental concepts and then apply those concepts in hands-on software exercises. To reinforce your learning, we also have quizzes associated with the module, and these quizzes help you prepare for the mid-term and final exams. Most modules consist of the following activities/components:

- **Reading** 1 or 2 chapters from the e-book. Links to external materials such as a review PDF, supplementary readings, videos and websites will be provided to assist you.

- A **Reading Quiz** related to the reading assigned in the module to test your comprehension of the material. You can take all quizzes as many times as you want and the highest grade will be recorded. Rather than an assessment tool, quizzes are used more as a learning tool and communicates to us that you're following the course material. In addition, quizzes make for a great test review tool.

- A **Problem Set** that will require you to apply material from the reading in the module. You will submit some problem sets via D2L but we will also conduct some problem sets in class through small-group activities. Afterwards individual responses will be uploaded via D2L. There are a total of 5 problem sets, with one optional.

- A **Computer-based lab assignment** designed to test your ability to construct and execute remote sensing workflows using geospatial software. Lab instructions for each lesson are provided in MS Word or PDF form for you to download and print for reference as you proceed through the hands-on exercises with data and software. You will submit your lab work to the associated D2L "Assignments" box for assessment. **Assignments are not accepted via email and D2L is the only authorized system for submitting lab assignments.** This is because D2L creates a time-stamp for submissions and also lets you confirm what you have uploaded to the site. To avoid technical issues plan to upload your assignment at least 15-30 minutes before the deadline to ensure it is successfully uploaded by the deadline. There are a total of 9 lab assignments.

Complimentary to the weekly modules, the following activities are also included this semester:

- A **Group Research Project**, where students research and present to the class an example of how remote sensing can be used to monitor environmental change.

- A **Midterm** and **Final** assesses students' understanding of course material. The date and time of the final exam are located on the course schedule. Students completing projects for Honors credit should submit their work via email by the final exam date/time.

GRADING

Students earn grades that reflect the extent to which they achieve the student learning objectives listed above. Opportunities to demonstrate learning and assess performance are based on six facets of understanding (J. McTighe and G. Wiggins, 2004. Understanding by Design) that include Explanations, Interpretations, Applications, Perspectives, Empathy (e.g. read, discuss and write about scientific results) and Self-Knowledge (e.g. propose solutions to what activity didn't work for you or your peers). These facets will be assessed based on the following tasks:

- **Quizzes (15% of final grade)** –These quizzes can be repeated as many times as the student wants and until the student is satisfied with the grade. Feedback/Hints will be provided for each correct or wrong answer (see example quiz). This knowledge then will be used to translate to the software side of the class (which can often obscure the analytical steps behind different tools).

- **Problem sets (20% of final grade)** – Problem sets will accompany several modules. Each student will submit the answers to the problem sets on D2L upon which they will be graded and assessed using a rubric.

- **Lab assignments (35% of final grade)** – Lab activities will be done using Google Earth Engine. Lab reports will be graded and assessed based on a rubric in D2L.

- **Group research project (10% of final grade)** – Students will work in groups of 4-5 to research a remote sensing application and share with the class how this application can be used to monitor social or environmental change. Students will deliver a short presentation to their peers (8 minutes + 2 minutes for questions).

- **Midterm and Final exams (20% of final grade)** – The Midterm Exam covers material presented in the initial course models. The Final Exam is comprehensive and includes material covered before and after the mid-term.

The final grading scale is shown below.

Letter Grade	Percentages	Points
A	90% and above	% of Total
B	80 - 89%	% of Total

C	70 - 79%	% of Total
D	60% - 69%	% of Total
F	59% and below	% of Total

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at:

Incomplete: http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete
Withdrawal: http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal

SCHEDULE

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor. Primarily this may happen if the pace of the course slows down or accelerates based on student's comprehension of different course modules. The final exam date is definite. The mid-term date is an approximation but may shift by 1-2 classes depending on how quickly we move through course material. The most up to date information about schedules, assignments, and due dates will be posted on the course's D2L site and we encourage students to check D2L course content material frequently.

Week	Dates	Module Topic	Readings	Problem Set	Lab
1	Aug 23/25	Intro to Remote Sensing of the Environment and Critical Remote Sensing	1- Jamon Van Den Hoek 2022 and 2- What is Remote Sensing (NASA)? 3-The Politics of Pixels- section IV (expose, engage, empower)		Lab 0: Access Earth Engine

			(Bennett et al 2022		
2	Aug 30/Sept 1	JavaScript and Cloud based Remote Sensing	EEFA F1.0 Sec 1-3		No Lab
3	Sept 6 (Guest lecture, Nikki Tulley)	Expose, Engage, Empower with Remote sensing: Nikki Tulley, Navajo Nation Water Resources and/or Ladies of Landsat	none		Lab 1: Introduction to Google Earth Engine JavaScript API
	Sept 8 (Guest Lecture, Aaryn Olsson)	Planet (and commercial optical imagery)	none		
4	Sept 13/15	Electromagnetic Radiation, Visual Interpretation, and Spatial Resolution	F1.1 Sec 1-2, F1.3 Sec 1-2, Jensen Ch. 2		No Lab
5	Sept 20/ 22	Introduction to Multi-spectral Imagery	F1.1 Sec 3-5, F1.3 Sec 3-4	PS1	Lab 2: Visual Image Interpretation
6	Sept 27/ 29	Remote Sensing of Vegetation	F2.0 sec 1, F3.1 Sec 1 TBD phenology reading	PS2	Lab 3: Multi-spectral Remote Sensing
7	Oct 4/ 6	Remote Sensing of Land Cover, Water, Fire, and Urban Environments	F2.0 Sec 2; F4.4 Sec 1-5	PS3	Lab 4: NDVI
8	Oct 11	Midterm Exam Review	No reading	PS4	Lab 5: Binary Classification
	Oct 13	No class, just lab- study for your midterm!	No reading		
9	Oct 18	Mid Term Exam	No reading		No Lab

	Oct 20	Remote Sensing of Climate: Temperature, Precip	F1.2 Sec 1-5; A1.5 Sec 1.1-1.2; F4.2 Sec 1-4		
10	Oct 25	Cloud Compositing	F 4.3 Sec 1 and 3		Lab 6: Time Series
	Oct 27	Radar	A1.8 Sec 1; 3- What is SAR?		
11	Nov 1	Water mapping with radar	A 2.3 Sec 1 & 3		Lab 7: Radar
	Nov 3	Supervised classification	F2.1 Sec 1 and 2		
12	Nov 8	Accuracy Assessment	F2.2 Sec 1	PS 6 Optional	Lab 8: Supervised Classification and Accuracy Assessment
	Nov 10	Using geometry (vector) data and reducers to summarize data in Earth Engine	F 5.0 Sec 1-5		
13	Nov 15	Radiometric resolution and SmallSats	Planet product spec document ation	PS5	Lab 9: Commercial Imagery
	Nov 17	The commercial satellite industry	Blog on open data and satellite imagery as commoditi es by Joe Morrison		
14	Nov 22	The SocialPixel Lab Portfolio- Detecting floods in Tucson, roads in protected areas of Central America, blue tarps on damaged roofs	none		

		in Louisiana, and flooded rice in Bangladesh			
	Nov 24 (No class)	Thanksgiving break (no class)			
15	Nov 29/ Dec 1	Group Presentations	None		
16	Dec 6/ Dec 8	Final Exam Review	None		
17	December 12 @ 3:30pm - 5:30pm	Final exam	None		

LATE WORK POLICY

Work will be accepted late in the case of documented emergency or illness without penalty (see ATTENDANCE POLICY below). Extensions will be granted for religious observances in accordance with university policy. If you have a job interview you can be granted an extension provided you contact the instructors at least 1 week ahead of your scheduled conflict. Late submissions due to illness/religious observance/family emergency will not be accepted if an extension has not been granted via email.

The D2L item for an assignment will be open for submission up to 24 hrs after the due date (for submission with a one letter grade penalty). Late submissions are not permitted after this 24hr window without a valid reason per university policy on absences. One letter grade will be deducted for submissions submitted within 24 hr of the due date and submissions are not allowed after this 24hr window. Work that has not been submitted will be assigned a zero in the gradebook for that topic/assignment. In order to be fair to other students, we can't accept submissions outside the stated due dates except in cases that adhere to the policy on absences (i.e. death in family, medical issue with notification, and so forth).

ATTENDANCE POLICY

This course follows UA's policy concerning Class Attendance, Participation, and Administrative Drops. The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable
http://policy.arizona.edu/human-resources/religious-accommodation-policy

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See:
https://deanofstudents.arizona.edu/policies/attendance-policies-and-practices

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings. Absences may affect a student's final course grade.

Students who need to miss a class, or series of classes, due to illness or the need to quarantine/isolate are responsible for emailing their course instructor, with copy to the Dean of Students at DOS-deanofstudents@email.arizona.edu, to let them know of the need, as soon as possible. There is no need for a medical excuse to be provided for absence of up to a week.

If you anticipate being absent, are unexpectedly absent, or are unable to participate in class online activities, please send a message to the class instructor email address as soon as possible. *To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or drc-info@email.arizona.edu.*

If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057.

If you miss a class you need to send an email to the instructor email list within 24 hours of the missed class in order to receive extension on assignments, in-class activities or exams. This email can be very brief ("Dear Professor/TAs - I missed class on due to . I will send an email when I am able to return to academic activities."). The follow up email allows us to determine the length of extension to give you for assignments.

If your health or personal situation (i.e. illness that exceeds 1-2 days or a death in family) are severe enough that it is too difficult to send an email within 24 hours of the missed class, then you should contact the following offices: 1) UofA Disability Resource Center to get assistance for health situations more significant than cold/flu, 2) Dean of Students who can provide assistance in case of death in the family or other family health situations (prolonged illness of family member) that affect your academic performance.

HEALTH & SAFETY POLICIES

Face coverings are encouraged but not required in our classroom: Per UArizona's Administrative Directive, face coverings that cover the nose, mouth, and chin are encouraged to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). During our in-person class meetings, we will respect CDC guidelines, which suggest wearing appropriately-worn face coverings indoors. Per UArizona's Administrative Directive, face coverings that cover the nose, mouth, and chin are strongly encouraged to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios).

Per UA attendance policy, students are responsible for completing any work that they might miss due to illness or the need to quarantine/isolate, including assignments, quizzes, tests and exams. Students are responsible for communicating with their instructor(s) via the means of communication established by the instructor(s), e.g., via D2L, email, etc.

In person classroom attendance:

- If you feel sick, or may have been in contact with someone who is infectious, stay home. Except for seeking medical care, avoid contact with others and do not travel
- Notify your instructors if you will be missing an in person or online course.
- Campus Health is testing for COVID-19. Please call (520) 621-9202 before you visit in person.
- Visit the UArizona COVID-19 page for regular updates.

Academic advising: If you have questions about your academic progress this semester, or your chosen degree program, please note that advisors at the Advising Resource Center can guide you toward university resources to help you succeed.

Life challenges: If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office can be reached at 520-621-2057 or DOS-deanofstudents@email.arizona.edu.

Physical and mental-health challenges: If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

ADDITIONAL COURSE POLICIES

Class Behavior Policy (adapted from University guidelines)

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community. See http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students.

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.). Laptops are permitted in class provided they are used for taking notes. It is distracting to other students if you use a laptop to view social media or other websites unrelated to the class. Refrain from using your phone in class – if you must make a quick call or message due to a family situation or other occurrence just step outside the classroom.

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Accessibility and Accommodations

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, https://drc.arizona.edu) to establish reasonable accommodations.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed.

If a student is found to have copied data files/answers from another student or provided data files/answers to another student a grade of zero will be assigned for that assignment to both students involved and a report will be submitted to the Dean of Students. Additional penalties may be applied in cases of repeated plagiarism or academic misconduct at the discretion of the Dean of Students.

Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity.

The University Libraries have some excellent tips for avoiding plagiarism, available at http://www.library.arizona.edu/help/tutorials/plagiarism.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement because many of the course materials are drawn from copyrighted material (e.g. textbook).

UA Nondiscrimination and Anti-Harassment Policy

The University is committed to creating and maintaining an environment free of discrimination; see http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy Our classroom is a place where everyone is encouraged to express well-formed opinions and

their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

Survivor Advocacy

In an effort to be supportive and affirming of students impacted by gender-based and sexual violence, it is important that students are aware of confidential options for survivors. The University of Arizona's Survivor Advocacy Program is a free and confidential resource for students impacted by gender-based or sexual violence. Confidential advocates work with students to support overall wellbeing, academic and emotional needs. This includes explaining rights and options, resource referral and safety planning. You can reach a confidential advocate by visiting www.survivoradvocacy.arizona.edu or calling 520-621-5767. Find out more information about the program by visiting www.survivoradvocacy.arizona.edu.

Additional Resources for Students

UA Academic policies and procedures are available http://catalog.arizona.edu/policies. Student Assistance and Advocacy information is available at http://deanofstudents.arizona.edu/student-assistance/students/student-assistance

Confidentiality of Student Records

http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa

Course Copyright

All course materials students receive or to which students have access are protected by copyright laws. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials is strictly. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University's Code of Conduct, and/or liable under Federal and State laws.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Providing student email addresses to a third party is not permitted. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA email to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of electronic resources provided by The University of Arizona. This conduct may also constitute copyright infringement.