# Syllabus CS [4|5]113

# Distributed Operating Systems (Fall 2022)

**Class hours:** Tuesday/Thursday 12:00 pm – 1:15 pm
**Location:** Sarkeys Energy Ctr P0203

**Final Exam:** Wednesday December 14, 1:30 pm – 3:30 pm
**Location:** Sarkeys Energy Ctr P0203

## Instructors

Dr. Christan Grant

- **Email:** cgrant@ou.edu
- **Office Hours:** Monday 3:30 pm – 5:00 pm; Thursday 3:00 pm – 4:00 pm (by appointment only)
- **Location:** Zoom

## Teaching Assistant

Jasmine DeHart

- **Email:** dehart.jasmine @ ou.edu
- **Office Hours:** Tuesday 3:00 pm – 4:00 pm; Friday 11:00 am – 12:00 pm
- **Location:** Zoom

**Note: Any email messages to the professors or teaching assistants must include** `cs5113` **or** `cs4113` **in the subject line.** Any email without this string in the subject line will likely be filtered as junk.

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**External Tutors**

The William Kerber Teaching Scholars will be available for questions during the times listed below. Note that these assistants can provide general help with programming, compiling and editing, but will not always know about the class projects.

All of their office hours will be held in DEH 115 and on Zoom.

The Zoom ID is 920-7171-4976.

*cstutoring* is the code word.

**Crystal Zhang, Marcos Bernier, Kenin Tran** are available at the following times:

| Day | DEH 115 Times | Zoom Times |
| --- | --- | --- |
| Sunday | 12p - 5p | |
| Mondays | 1p - 5p | |
| Tuesdays | 10:30a - 1p | 9p - 12p<br>1p - 4p |
| Wednesdays | 1p -5p | |
| Thursdays | 10:30a - 1p | 9p - 12p<br>1p - 4p |
| Fridays | 1p - 3p<br>4p - 7p | |
| Saturday | 12p - 4p | |

*The above times are subject to change.*

# Prerequisites

The prerequisite for this course is Introduction to Operating Systems, CS 3113 or equivalent. Students are expected to have experience critically reading research papers. Student should have some experience building or evaluating large systems. Students should also be familiar with Networking topics.

# Course Details

This first half of the course will cover the key distributed operating systems topics. These topics include advanced architectures, processes, communication, and coordination. In the second half of the course, the class will be reading and presenting important distributed systems papers. It is ill-advised to take this course with other programming heavy courses.

## Student Outcomes

In addition to learning the appropriate material, by the end of the semester, students will increase their:

- C: An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
- I: An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.

## Learning Management System

Course website is https://oudalab.github.io/cs5113fa22. We will also use the Canvas learning system. This course website can be reached through canvas.ou.edu. Please check system page regularly to keep informed of all announcements, updates, and changes. All lectures and office hours will be held in-person and/or on zoom.

## Course Materials

**Required Textbooks:**

- M. van Steen and A.S. Tanenbaum, *Distributed Systems*, 3rd ed., distributed-systems.net, 2017. (ISBN 978-1543057386)

Note, a free digital copy may be available online from the author.

- CS 4113 OU Bookstore Link
- CS 5113 OU Bookstore Link

## Computer Accounts and Software

Increasingly, software is developed and executed in "the cloud". This semester the class will make use of a popular cloud infrastructure. Students should be able to deploying containers virtual machines with various configurations, across linux servers. All students enrolled in class should also have a CS account and access to a Linux-based systems in the CS department. For most computer science students, an account will be automatically created. If not, you can send an email to the course instructors. All code written for this course MUST run using the compilers or interpreters that will be specified for the assignments. It is your responsibility to ensure that your code runs on these systems. For compatibility reasons, we recommend developing and testing on a Linux-based machine. We also expect that each student has a GitHub account.

## Covid-19 Considerations

All students are expected to wash their hands, social distance, and wear a mask according to school, state, and federal guidelines. It is my goal to be extremely considerate to personal and family situation, but **please alert me to any problems you *may* be facing as early as possible.** Please review the OU covid policies: https://www.ou.edu/coronavirus.

### Provosts Attendance Statement

A temporary university policy has been established to protect the OU community by ensuring that students who are ill or required to isolate feel encouraged to remain at home. Missing a class session or other class activity due to illness or isolation will not result in a penalty for the absence, and the student will not be asked to provide formal documentation from a healthcare provider to excuse the absence. This policy is based on all students and faculty adhering to the principles of integrity, honesty, and concern for others.

Students who are experiencing symptoms of COVID-19, including cough, fever, shortness of breath, muscle pain, headache, chills, sore throat, loss of taste or smell, congestion or runny nose, nausea or vomiting, or diarrhea or who have been in close contact with others who have symptoms should:

- Remain at home to protect others
- Ensure that any needed screening has been conducted (COVID-19 Screening and Reporting Tool) and any needed treatment obtained
- Contact the instructor prior to absence or inability to participate, if possible, and provide an honest report of the reason for which you cannot attend class or complete a course activity
- Continue to complete coursework to the extent possible, using Canvas, zoom, and other online tools
- Submit assignments electronically to the extent possible and as directed by the instructor
- Communicate with the instructor to arrange modifications to deadlines or work requirements or reschedule exams or other important course activities, when it is necessary

## Course Policies

- Attendance: You are expected to attend all of the class lectures. The class contains many lectures led by students and we expect discussion periods. The quality of the course is diminished when class attendance is low.

- Readings: For each lecture day, the course schedule lists a set of readings. You are responsible for this material **before class begins.**

- Laptop Computers: It is the responsibility of each student in this class to have a working laptop computer with ample battery (at least 2 hours of life under moderate usage) and wireless Internet connectivity. If your computer requires repair during the semester, it is your responsibility to make arrangements to have another computer available and to get the necessary software installed. There exist campus resources (including financial help) to repair broken computers; please see the instructors if you would like information about these programs. Note that temporarily borrowing a computer from a fellow student in the class can present a number of problems, including the potential for academic misconduct.

- Newsgroups and Email: The newsgroup on Canvas should be the primary method of communication (outside of class). This allows everyone in the class to benefit from the answer to your question, and provides students with more timely answers since the instructors check Canvas at least once a day. Matters of personal interest should be directed to email instead of to the newsgroup, e.g. informing the instructors of an extended personal illness.

- Incompletes: The grade of "I" is intended for the rare circumstance when a student who has been successful in a class has an unexpected event occur shortly before the end of the class. We cannot consider giving a student a grade of "I" unless the following three conditions have been met:

    1. It is within two weeks of the end of the semester.
    2. The student has a grade of C or better in the class.
    3. The reason that the student cannot complete the class is properly documented and compelling.

- Religious Holidays: It is the policy of the University to excuse the absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required classwork that may fall on religious holidays.

- Classroom Conduct: Class sessions will be recorded. Students are welcome to keep their cameras on or off. Note, keeping cameras on does help the instructor identify any confusions. Questions can be asked via the Video Conference chat or audibly. We ask that distruptions (microphone noise, or visual distractions) be held to a minimum. Note, excessive distruptive behavior may cause the instructor to ask that you leave the session and may charge you with a violation of the Student Code of Responsibilities and Conduct. Examples of disruptive behavior include:

    - Allowing a cell phone or pager to repeatedly beep audibly.
    - Playing music or computer games during class in such a way that they are visible or audible to other class members.
    - Exhibiting erratic or irrational behavior.
    - Behavior that distracts the class from the subject matter or discussion.
    - Making physical or verbal threats to a faculty member, teaching assistant, or class member.
    - Refusal to comply with faculty or teaching assistant direction.
    - Inappropriate comments towards race, gender, religon, or sexual orientation.

**Examples of Integrity violation**

- Feel free to discuss all assignments with the instructors or the TAs.

- Code (projects and homework): you may **discuss** code solutions with other students. However:
    1. You may not look at or share code with others;

2. If you discuss a solution with anyone, you must document their names in your assignment;

3. If you use an external resources (e.g. StackOverflow.com) you must document this in your code.

- Make sure that your computer account is properly protected. Use an appropriate password, and do not give your friends access to your account or your computer system. Do not leave printouts, computers or thumb drives around a laboratory where others might access them.

- Programming projects will be checked by software designed to detect collaboration. This software is extremely effective and has withstood repeated reviews by the campus judicial processes.

- Upon the first documented occurrence of inappropriate collaborative work or of taking a solution from a network resource, the instructors will report the academic misconduct to the Campus Judicial Coordinator. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code (http://integrity.ou.edu). Both the provider of a solution and the receiver of a solution will be treated equally in the misconduct process.

## Integrity Examples

| Situation | Integrity Violation? |
|---|---|
| Students A and B meet and work on their assignment together. Neither student prepared anything in advance and the resulting work is identical. | Yes |
| Students A and B create drafts of their assignment independently and get together to compare answers and discuss their understanding of the material. Each person decides independently whether to make changes that are discussed. | No |
| Students A and B agree to prepare drafts of their assignments independently, but only Student A does. Student A shares her draft to Student B who reviews it and offers suggestions for improvement. | Yes |
| Students A and B agree that student A will work the even problems and Student B will work the odd problems. They share their work. | Yes |
| Students A and B agree that student A will work on a read function and Student B will work the sorting function. They share their | Yes |

| Situation | Integrity Violation? |
|---|---|
| solutions. | |
| Student A has completed a project and is helping Student B complete the same project. Student A explains to Student B what student B's code actually does, which is different than what Student B thinks the code does. Student B determines how to modify the code independently. | No |
| Student A has completed a project and is helping Student B complete the same project. Student B is having trouble getting one part of the program to work, so Student A texts Student B three lines of their solution. | Yes |
| Student A has completed a project and is helping Student B complete the same project. Student B is having difficulty getting the program to work, so student A tells student B exactly what to type for several lines. | Yes |
| Student A has completed a project and is helping student B complete the same project. Student B is having difficulty getting the program to work, so Student A suggests that Student B use a specific debugging strategy (e.g. "Print out the contents of the variable"). | No |
| Student A has completed a project and is helping Student B complete the same project. Student A shows Student B an example program in the online textbook that will be helpful in figuring out the solution to the problem. | No |
| Student A publishes solutions to an assignment on a public Internet page. | Yes |
| Students A and B work on a project together. After they have finished it, student A takes the code and modifies it so the programs do not appear to be identical. | Yes |
| Student A copy and pastes code from a public Internet page but changes the variable names. | Yes |

[Academic Misconduct Reporting Form](#)

# Grading

Points for this class will come from a variety of sources. The different components are weighted as follows:

|  | Percentage |
| --- | --- |
| Homework | 25% |
| Assignments | 25% |
| Midterm | 20% |
| Final | 30% |
|  | **100%** |

To perform well, this class demands a lot of critical reading and reviews. Students are highly-encouraged to complete and submit assignments early at every opportunity. Undergraduate students will have a fewer assignments.

## Homework

Homework will come from two sources, in the first half of the course and the second half of the course. In the first half, after we finish each chapter, submit a summary chapter or notes from the lectures during this period. In the second half, we will have paper reviews for each student paper. Graduate students will be graded on (floor(max_reviews * .9)) reviews. Students in the undergraduate section will be graded on (floor(max_reviews * .8)) reviews. Across both halves of the semester, students will be assigned programming activities to help reinforce concepts discussed.

## Assignments

Each student will have one graded paper presentation to the class. Students will also have to give substantial comments/feedback based on the substance of the presentation. Graduate students will be graded on (floor(max_feedback * .9)) feedback. Students in the undergraduate section will be graded on (floor(max_feedback * .8)) feedback.

## Midterm

The Midterm exam will be a project proposal for the final project.

## Final

As required by the university, the course will have both a midterm and a comprehensive final. Both undergraduate and graduate students will need to submit reports. Students will need to submit a project with a report for the final project. As part of the report, students will discuss the specific os dificulties encountered and solved in developing the project. The report will likely be in ACM Conference/Demo format. Details will be given out during the semster.

## Submission Format

For written student submissions should only be `.txt` files, portable document format `.pdf`, or Markdown `.md`. Files of type `.doc`, `.docx`, or `.rtf` will not be accepted. Compressed files should be of type `.gz` or `.tar.gz`. Files of the `.rar` format will not be accepted. Other file types, particularly coding files, may be used in the class. The expected file type will be stated. Often, files packaged under non-Unix/Linux flavored operating systems, such as Windows, have a non-negative number of compatibility issues with our grading systems. **If the graders cannot open files for these reasons, the project will not receive credit.**

## Late Policy

Late policies are often at odds with the ability for students to receive feedback. I strongly encourage all students to submit assignments at the posted **due date**; not the date the assignment closes. If assignments are not completed on time, the frequent assignments will mount up and the amount of work that can be due may be in surmountable. The policy is that all assignments must be completed before they are graded. This typically means that students will have 3-7 days to complete the assignment. If as long as a student submit the assignment we will not take off extra points. However, the grading time will not be announced and we will not accept assignments after the deadline.

## Final Grade Scale

Grade cut-offs will be at or below the traditional 90, 80, 70, etc. cut-offs.

## Grade questions

All grading questions must be addressed within one week of the graded exam being returned.

## Canvas Grade Summary

Canvas has a grade book that is used to store the data that are used to calculate your course grade. It is the responsibility of each student in this class to check their grades on Canvas after each assignment is returned. If an error is found, bring the graded document to any of the instructors or TAs, and we will correct Canvas.

**Student Evaluations:**

The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

# Miscellaneous

## Course Evaluations

The College of Engineering utilizes student ratings as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

## Reasonable Accommodation

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. This includes your academics, housing, and community events. If you are experiencing a disability, a mental/medical health condition that has a significant impact on one or more life functions, you can receive accommodations to provide equal access. Possible disabilities include, but are not limited to, learning disabilities, AD(H)D, mental health,

and chronic health. Additionally, we support students with temporary medical conditions (broken wrist, shoulder surgery, etc.) and pregnancy. The Office of Disability Services is located in the University Community Center at 730 College Avenue; the phone is 405-325-3852 or TDD only is 405-325-4173. Email at adrc@ou.edu.

# Adjustment for Pregnancy/Childbirth-Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact your professor or the Accessibility and Disability Resource Center at 405-325-3852 as soon as possible. Also, see the Institutional Equity Office FAQ on Pregnant and Parenting Students' Rights for answers to commonly asked questions.

### Mental Health Support Services

If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm. 201, Norman, OK 73019. To schedule an appointment call (405) 325-2911. For more information, please visit University Counseling Center.

# Technical Support

For OU IT support, please phone (405) 325-HELP. For help with issues pertaining to any CS department machine (in room DEH 115). Please contact the system administrator John Mueller at jmueller@ou.edu.

# Title IX Resources

Anyone who has been impacted by gender-based violence, including dating violence, domestic violence, stalking, harassment, and sexual assault, deserves access to resources so that they are supported personally and academically. The University of Oklahoma is committed to offering resources to those impacted, including: speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you would like to speak with someone confidentially, please contact OU Advocates (available 24/7 at 405-615-0013) or another confidential resource (see "Can I make an anonymous report?"). You may also choose to report gender-based violence and discrimination through other means, including by contacting the Institutional Equity Office (ieo@ou.edu, 405-325-3546) or police (911). Because the University of Oklahoma is committed to the safety of you and other students, I, as well as other faculty, Graduate Assistants, and

Teaching Assistants, are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures that occur in: class discussion, writing assignments, discussion boards, emails and during Student/Office Hours. For more information, please visit the Institutional Equity Office.

# Final Exam Preparation Period

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy.

### Reporting Incidents

The University is also committed to ensuring that all students, faculty, and staff are aware of their options should they experience sexual misconduct or harassment. Those who wish to report an incident to the University may do so by contacting the Sexual Misconduct Office at (405) 325-2215 or smo@ou.edu, or by completing the online complaint form found here. Incidents of sexual misconduct or harassment may also be reported to confidential University resources, such as counseling services at (405) 325-2911 or OU Advocates. OU Advocates is a 24-hour confidential crisis line available to the entire OU community for advocacy assistance with medical services, reporting options, academic support, and much more. OU Advocates can be reached at (405) 615-0013. More information about reporting options and available support resources can be found here.

### 24-Hour Reporting Hotline

As an additional measure of protection for our students, faculty, and staff, the University implemented the 24-Hour Reporting Hotline. This hotline takes reports of bias, discrimination, physical or mental harassment, or misconduct by members of the University community. Callers will be referred to resources as needed and reports will be forwarded to campus departments as appropriate. The 24-Hour Reporting Hotline can be accessed by calling (844) 428-6531 or going online to ou.ethicspoint.com.

# Emergency Protocol

During an emergency, there are official university procedures that will maximize your safety.

### Severe Weather

If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather:

1. *LOOK* for severe weather refuge location maps located inside most OU buildings near the entrances.
2. *SEEK* refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
3. *GO* to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. GET IN, GET DOWN, COVER UP.
5. *WAIT* for official notice to resume normal activities.

Severe Weather Refuge Areas

Severe Weather Preparedness - Video

## Armed Subject/Campus Intruder

If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots:

1. *Avoid*: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911.
2. *Deny*: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room.
3. *Defend*: As a last resort, fight to defend yourself.

For more information, visit http://www.ou.edu/emergencypreparedness.html

Shots Fired on Campus Procedure - Video

## Fire Alarm/General Emergency

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates:

1. *LEAVE* the building. Do not use the elevators.
2. *KNOW* at least two building exits.
3. *ASSIST* those that may need help.

4. *PROCEED* to the emergency assembly area.
5. *ONCE* safely outside, *NOTIFY* first responders of anyone that may still be inside building due to mobility issues.
6. *WAIT* for official notice before attempting to re-enter the building.

OU Fire Safety on Campus

## Mental Health Support Services

If you are experiencing any mental health issues that are impacting your academic performance, counseling is available at the University Counseling Center (UCC). The Center is located on the second floor of the Goddard Health Center, at 620 Elm Rm. 201, Norman, OK 73019. To schedule an appointment call (405) 325-2911. For more information, please visit University Counseling Center.

## Copyright Syllabus Statement for In-Person or Online Courses

Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

### Syllabus Attendance Policy

A temporary university policy has been established to protect the OU community by ensuring that students who are ill or required to isolate feel encouraged to remain at home. Missing a class session or other class activity due to illness or isolation will not result in a penalty for the absence, and the student will not be asked to provide formal documentation from a healthcare provider to excuse the absence. This policy is based on all students and faculty adhering to the principles of integrity, honesty, and concern for others.

Students who are experiencing symptoms of COVID-19, including cough, fever, shortness of breath, muscle pain, headache, chills, sore throat, loss of taste or smell, congestion or runny nose, nausea or vomiting, or diarrhea or who have been in close contact with others who have symptoms should:

- Remain at home to protect others

- Ensure that any needed screening has been conducted (COVID-19 Screening and Reporting Tool) and any needed treatment obtained
- Contact the instructor prior to absence or inability to participate, if possible, and provide an honest report of the reason for which you cannot attend class or complete a course activity
- Continue to complete coursework to the extent possible, using Canvas, zoom, and other online tools
- Submit assignments electronically to the extent possible and as directed by the instructor
- Communicate with the instructor to arrange modifications to deadlines or work requirements or reschedule exams or other important course activities, when it is necessary

# 4.10 FINAL EXAM PREPARATION PERIOD (via faculty handbook)

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week.

4.10.1 Student-Faculty Policies and Information

(A) Assignmentsor projects worth less than 10 percent combined total of a student's grade may be assigned at any time prior to pre-finals week and may be due during pre-finals week. However, no assignmentsor projects may be due on the last two days of pre-finals week. Quizzes may be given during pre-finals week, but cannot account for more than 3% combined total of the final grade. Exams may not be given during pre-finals week.

(B) Assignments, take-home examinations, in-class examinations, or projects worth more than 10 percent of a student's grade must be scheduled at least 30 days prior to the first day of finals and must be due or given prior to pre-finals week. Any assignment that is to take the entire semester to complete may be accepted or presented during the first three weekdays of pre-finals week provided the syllabus explicitly states that the assignment can be turned in prior to pre-finals week.

(C) Special casesdeviating fromthe Final Exam Preparation Period policy must be clearly stated in the course syllabus and approved by the chair of the department through which the course is offered. If the professor is the chair of the department, the professor must have these special cases approved by the dean of the college in which said department resides. If the professor is the dean of the college in which the

course is taught, the professor must have these special cases approved by the Senior Vice President and Provost.

(D) Special requests made by a student for an extension of assignment deadlines into pre-finals week may be granted subject to the discretion of the instructor.

(E) Final Exam Preparation Period policies must be placed in the course syllabus underneath the University Policy section. This policy applies only to 16-week courses during the spring and fall semesters.

This policy excludes make-up assignments, make-up tests, and laboratory examinations. It also does not apply to classes meeting one day a week for more than one hour or to classes without a university-scheduled final exam time during finals week.

All University laboratory classes and graduate courses are exempt from this policy.

No Student Government Association (SGA) Registered Student Organizations (RSO's) may hold meetings, banquets, or receptions or sponsor or participate in any activity, program, or related function that requires student participation during pre-finals week.

Violations to this policy should be reported to the chair of the department in which the course is taught or, in special circumstances, to the dean of the college and may be grounds for grade appeal.

## COVID Masking policy

Please refer to the university page for the official masking policies https://ou.edu/together/instructional-faculty.

https://www.ou.edu/together/instructional-faculty/instructional-continuity-guidance https://ou.edu/together/instructional-faculty/faq

The OU Masking Policy can be reviewed at https://www.ou.edu/together/university-mandatory-masking-policy. If you would like to add masking information to your syllabus, please use this site. It will be updated as needed through the semester.

## Other university instruction policies

# Land Acknowledgement

Long before the University of Oklahoma was established, the land on which the University now resides was the traditional home of the "Hasinais" Caddo Nation and "Kirikir?i:s" 🔊 Wichita & Affiliated Tribes. We acknowledge this territory once also served as a hunting ground, trade exchange point, and migration route for the Apache, Comanche, Kiowa and Osage nations. Today, 39 tribal nations dwell in the state of Oklahoma as a result of settler and colonial policies that were designed to assimilate Native people.

The University of Oklahoma recognizes the historical connection our university has with its indigenous community. We acknowledge, honor and respect the diverse Indigenous peoples connected to this land. We fully recognize, support and advocate for the sovereign rights of all of Oklahoma's 39 tribal nations. This acknowledgement is aligned with our university's core value of creating a diverse and inclusive community. It is an institutional responsibility to recognize and acknowledge the people, culture and history that make up our entire OU Community.

## Copyright Syllabus Statement

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# Links

## Key Class Resources

- Syllabus
- Class Schedule

**Dates and details in the syllabus and schedule are subject to frequent change, please check regularly. Major changes will be announced on Canvas.**

## External Resources

- Intro to Python
- gRPC Tutorial
- Docker Tutorial

This page is available online at: https://oudalab.github.io/cs5113fa22/syllabus

Go back to [CS(4                                    5)113](index)