CS251 – Data Structures and Algorithms Spring 2024

The requirements and restrictions of this syllabus may change as we progress during the semester.

Any official change will be announced via Brightspace only.

Course Information

CS25100 - Data Structures and Algorithms

Course credit hours: 3

Section: 13321 (LE1), 01/08/2024 - 04/27/2024, MWF from 1:30 PM to 2:20 PM, WTHR 200

Instructor(s) and Course Staff Contact Information

Instructor(s):

Andres Bejarano – abejara@purdue.edu

Office Hours: Wednesday, 3:00 PM to 4:00 PM, HAAS 170

Teaching Assistants:

Check Brightspace for the complete list of GTAs and UTAs.

Note: Check Brightspace for information about TA office hours (times and locations).

Instructional Specialists:

- Chelsea Clements cvclemen@purdue.edu
- Jonathan Morris morrisjb@purdue.edu
- Justin Gillingham jdgillin@purdue.edu

Note: Instructional specialists have no teaching or grading responsibilities. They will dismiss any email unrelated to their tasks.

Course Description

This course offers a comprehensive introduction to key data structures and algorithms within computer science. Emphasis is placed on crafting efficient implementations, thoroughly understanding, contrasting

various data structures, and their integration into multiple algorithms. Students will learn to estimate the efficacy of these structures in real-world applications. The course aims to equip students with the skills to choose, create, and critically evaluate data structures for specific problems.

Some of the topics covered are Runtime analysis of algorithms, Primitive data structures, Heaps, Trees, Searching and Sorting, Binary Search Trees, Hashing, Graphs, Tries, and Spatial Data Structures

Course Website

We use <u>Brightspace</u> for the course management system. You need to familiarize yourself with the platform, which is crucial for your success in this course. Explore the site, especially the left-hand course menu, which contains your course content and student resources. Start by reading the items on the Course Homepage. This particular page is your central hub, providing links to critical course deadlines, help files, and detailed instructions for commencing your studies.

General Learning Goals of the Course

- Understand approaches to problem-solving and algorithm analysis.
- Understand and analyze various algorithms in terms of space and runtime.
- Understand basic data structures, including their operations, possible implementations, and performance.
- Integrate data structures into algorithms.
- Implement data structures and algorithms to solve specific problems.

Prerequisite Courses, Skills, and Knowledge

As stated in the Computer Science Prerequisite Flowchart, the course prerequisites are:

- CS 182 Foundations of Computer Science
- CS 240 Programming in C

The following are the concepts we assume every student already knows when taking CS 251:

- Basic math: equations, functions, fundamental set concepts, logarithms, summations.
- Fundamental discrete math: counting methods, Boolean expressions, and proof techniques (e.g., direct proofs, contrapositive, contradiction, induction, construction, diagonalization).
- Basic algorithm design and programming (e.g., statements, variables, conditionals, loops, functions, passing function parameters (e.g., value, reference, and pointer), input/output, reading/writing files).
- Static data structures: arrays and matrices.

- Dynamic data structures: linked lists (e.g., singly, doubly, circular), trees.
- Object-Oriented Design.
- Recursion (e.g., structured induction, recurrence relations, recursive algorithms).
- Basic coding and debugging skills.

Recommended Textbooks

Data Structures and Algorithms in C++, Second Edition By Michael Goodrich, Roberto Tamassia, and David Mount John Wiley and Sons Inc.

Introduction to Algorithms, Fourth Edition By Cormen, Leiserson, Rivest, and Stein The MIT Press

Algorithms, Fourth Edition
By Robert Sedgewick and Kevin Wayne
Addison-Wesley
https://algs4.cs.princeton.edu/home/

Note: Textbooks are recommended. None is required.

Learning Commitment Expectations

We discuss data structures and algorithms in their mathematical and logical abstraction. You need to focus on these to truly grasp their nature rather than just implementing them in a programming language. Understanding the "how" and "why" is crucial, which comes with the review of the topics and practice. So, mere lecture attendance won't suffice, as mastery comes through practice. These complexities are best understood through hands-on experience and consistent application of theoretical knowledge.

You need to be disciplined and self-regulated to be successful in this course. As a face-to-face learner, you are responsible for actively engaging with the material and staying on top of the deadlines. Regular engagement with Brightspace is essential for accessing course announcements and important information. Remember to complete your assignments well before due dates, especially considering the planned maintenance downtimes for Brightspace, details of which are available on the platform.

Lastly, communication is the key to your success. Check the course platforms frequently (e.g., twice a day at least). Staying informed and responsive to updates is crucial. By taking ownership of your learning process, maintaining discipline, and actively engaging with both the theoretical and practical aspects of the course, you set yourself on the path to mastering data structures and algorithms.

How We Conduct this Class

Lectures are conducted face-to-face, with all materials presented available on <u>Brightspace</u>. Recorded lectures will be posted a week after, respectively. It's imperative to attend lectures for real-time engagement and clarification.

The Teaching Assistants conduct PSO sessions, tackling complex examples and problems akin to those in homework and exams. Attendance and participation in PSOs are crucial as they directly mirror the content and format of midterms and the final exam. Active engagement in these sessions is highly beneficial for exam preparation.

All course materials are protected under copyright laws and are strictly for personal use within this course. Unauthorized distribution or misuse will lead to disciplinary action through the Office of Student Rights and Responsibilities and the Legal Counsel.

Students with disabilities or requiring special accommodation must consult their advisors to discuss available options and ensure all necessary arrangements are in place. The course instructor(s) must receive the respective DRC letter before discussing and proceeding with accommodations.

Office Hours Policy

Office hours are open and public sessions designed to discuss lecture content and course activities. Individual sessions are not feasible due to the large class size. The schedule for office hours will be accessible on Brightspace once finalized. Office hours start in the second week of classes and conclude in the quiet week before finals. There are no office hours during observed days, breaks, and finals week.

Requests to review non-functioning code (e.g., "My code does not work...") are prohibited during PSOs. Instead, emphasis is placed on enhancing your debugging skills using your preferred IDE tools. Relying on print statements for debugging is discouraged due to its inefficiency and potential to mislead. Instead, polish your debugging skills using proper approaches such as assertions and unit testing. Debugging is crucial during technical interviews and in tech job positions.

While we won't review faulty code, we're open to discussing your logic when presented in pseudocode format. Prepare to explain your pseudocode solutions and engage with questions aimed at refining your approach. You're responsible for translating any guidance into actual code on your own time, ensuring we can assist as many students as possible during these sessions due to limited capacity.

PSO (Practice/Study/Observation)

PSOs are integral for reinforcing the material discussed in lectures. These sessions, led by Graduate TAs and assisted by Undergraduate TAs, focus on solving additional problems. Attendance at PSOs is expected of all students. Each session will cover the same material, ensuring consistency. Before each midterm, the TAs will have review sessions during their respective PSO. Also, homework and midterm

solutions will be discussed exclusively during these times. PSOs start in the second week of classes and conclude in the quiet week before finals. There are no PSO sessions during midterm weeks, observed days, breaks, and finals week.

Requests to review non-functioning code (e.g., "My code does not work...") are prohibited during PSOs. Instead, emphasis is placed on enhancing your debugging skills using your preferred IDE tools. Relying on print statements for debugging is discouraged due to its inefficiency and potential to mislead. Instead, polish your debugging skills using proper approaches such as assertions and unit testing. Debugging is crucial during technical interviews and in tech job positions.

TAs won't review faulty code but will review your logic when presented in pseudocode format. Prepare to articulate your pseudocode solutions and answer questions from TAs aimed at refining your thinking. Guidance will be provided in pseudocode format. It's your responsibility to translate this guidance into your code after PSO sessions, ensuring TAs can assist a wide range of students efficiently.

Homework Assignments

You will have seven graded homework assignments throughout the course. Assignments and their deadlines will be posted on Brightspace, with submissions due exclusively via <u>Gradescope</u> by 11:59 PM EST on the indicated day. No submissions will be accepted afterward or through other methods.

You must type your work using LaTeX (preferred), MS Word, or a similar quality text editor. Handwritten work, even images and diagrams, will not be graded. Submit your work as a single PDF file on Gradescope. Ensure each problem begins on a new page and follow the instructions for matching problems to page numbers. Correct submission and formatting are your responsibility; errors will lead to a 20-point deduction per improperly paged problem. You must provide detailed explanations for every answer (i.e., justify your answer), even if the problem description doesn't say so. Graders regard half of the points on correctness and the other half on explanations.

Include any images, diagrams, or pictures in a vertical layout with a clean background. Submissions lacking professional presentation will not be eligible for regrade requests. There are no extensions or late submissions; failure to submit by the deadline will result in a score of 0.

For grading purposes, we will only grade your latest submission.

Programming Projects

You will have four graded programming projects throughout the course. Projects and their deadlines will be posted on Brightspace, with submissions due exclusively via <u>Vocareum</u> by 11:59 PM EST on the indicated day. No submissions will be accepted afterward or through other methods.

All programming projects must be completed in C++, adhering to the specific requirements and submission guidelines detailed in each project description. The projects are designed to be completed

within the allotted time. Therefore, starting early is crucial. You must submit your source code, including all required and additional files, to Vocareum by the deadline.

Vocareum is for grading, not debugging. It will compile, run, and evaluate your code against provided and additional internal test cases (the latter will remain undisclosed). We will provide some test cases for you to check the efficacy of your code locally in your machine, yet these are not exhaustive. You must anticipate and test for additional scenarios independently. Review your approach if your code works locally but not on Vocareum (e.g., correctness, robustness, and performance). Then, check technical code aspects such as access modifiers, include statements, identifier initialization, file I/O, among others. Debugging and ensuring compliance with the project requirements is your responsibility.

Adherence to the project's technical specifications is critical. Code that works locally but fails on Vocareum likely omits certain scenarios. You must identify and rectify these before final submission. Keep in mind that we disable print statements from submitted source code files before execution. Projects that do not compile receive 0 points. No manual reviews or regrades will be provided if your submission fails to meet the technical requirements. Strive for a robust solution that considers a wide range of potential cases.

For grading purposes, we will only grade your latest submission.

Online Quizzes

Throughout the semester, your understanding and engagement will be assessed through 11 timed online quizzes hosted on Brightspace. These quizzes will cover material from recent lectures and are designed to evaluate your immediate comprehension of the concepts. Ensure you have a stable internet connection, as each quiz is 30 minutes long. You can consult textbooks and notes and use coding resources during the quiz.

Anticipate a quiz every Thursday, except for midterm weeks, Spring Break, and the quiet week. Access the quizzes in the Quiz section of the Brightspace course. You have one attempt per quiz unless stated otherwise. Each quiz will be available on Thursday from 9:00 AM to 11:59 PM EST. Ensure you complete each quiz within this window to avoid missing out on these crucial engagement and assessment opportunities.

Midterms

You will have three in-person midterms, each comprising short-answer questions. Read each question carefully and respond succinctly (i.e., a long answer does not guarantee full points, a correct and concisely explained answer does). Your answers will be scanned and uploaded to Gradescope for grading.

Bring your Purdue ID, pens, pencils, sharpener, and eraser for each midterm. While physical textbooks and handwritten notes are allowed, reliance on them is discouraged in favor of thorough prior study. Be

aware that all materials are subject to inspection to ensure fairness. Absolutely no electronic or digital devices are permitted; use of such will result in an automatic zero score and a formal report to the Office of Student Rights and Responsibilities.

Missing a midterm without valid justification results in a zero score. An absence must be approved by the Office of the Dean of Students; only then will we discuss a make-up midterm. No exceptions will be made outside of this process.

Students with approved testing accommodations must arrange their midterms with <u>Purdue Testing Services</u> (PTS) to coincide with the announced schedule (±1 hour). You must schedule this early in the semester and ensure all requirements are met. Failure to schedule with PTS means you must take the midterm under the standard conditions.

The following is the midterm schedule:

<u>First midterm:</u> Thursday, 02/01/2024, 8:00 PM EST – 9:30 PM EST.

Location: WTHR 200 and WALC 1055 (room assignment to be announced in Brightspace).

Duration: 60 minutes.

Topics: Runtime Expressions, Recursive Algorithms, Asymptotic Runtime Analysis, Arrays and Linked Lists, Stacks and Queues, Trees, Binary Heaps, Heap Sort.

Second midterm: Wednesday, 02/28/2024, 8:00 PM EST – 9:30 PM EST.

Location: WTHR 200 and WALC 1055 (room assignment to be announced in Brightspace).

Duration: 60 minutes.

Topics: Sorting, B-Trees, Red-Black Trees, and Hash Tables.

• <u>Third midterm:</u> Wednesday, 04/03/2024, 8:00 PM EST – 9:30 PM EST.

Location: WTHR 200 and WALC 1055 (room assignment to be announced in Brightspace).

Duration: 60 minutes. Topics: Graphs.

Final Exam

You will have an in-person final exam comprising short-answer questions. Read each question carefully and respond succinctly. Your answers will not be released on Gradescope.

Bring your Purdue ID, pens, pencils, sharpener, and eraser for the final exam. While physical textbooks and handwritten notes are allowed, reliance on them is discouraged in favor of thorough prior study. Be aware that all materials are subject to inspection to ensure fairness. Absolutely no electronic or digital devices are permitted; use of such will result in an automatic zero score and a formal report to the Office of Student Rights and Responsibilities.

Missing the final exam without valid justification results in a zero score. The absence must be approved by the Office of the Dean of Students; only then will we discuss a make-up final exam (which must be scheduled during finals week). No exceptions will be made outside of this process.

Students with approved testing accommodations must arrange their final exam with Purdue Testing
Services (PTS) to coincide with the announced schedule (±1 hour). You must schedule this right after the final exam schedule is announced and ensure all requirements are met. Failure to schedule with PTS means you must take the final exam under the standard conditions.

The Office of the Registrar schedules the final exam date and location during the semester. The final exam is comprehensive (i.e., all topics are evaluated) and scoped for 120 minutes.

Missing Work

Missing work receives zero points. No exception.

Absences and Extensions

We recognize life's unpredictability but aim to maintain fairness and equity for everyone. We require official notification from relevant university offices to consider any absence or extension request.

Types of notifications issued by the Office of the Dean of Students (ODOS):

- Grief Absence: ODOS notification for a death in the family or of a close friend.
- Medical Excuse: ODOS notification for hospitalization, emergency, or urgent care visits.
- Jury Duty: ODOS notification for jury service obligations.
- Quarantine: ODOS notification if ordered to quarantine by a medical provider.
- Minor Health Events: Medical Excused Absence from ODOS for standard health issues.
- Accessibility Issues: DRC letter/request due to an accident affecting cognitive or physical functions.
- Other Official Notifications: Any other verified notice from ODOS, DRC, or PUSH.

After receiving the ODOS notification, the instructor(s) will only discuss deadline extensions during office hours. No exceptions.

For medical excuses, ODOS must validate your medical notes due to privacy concerns. We dismiss emails or meetings disclosing medical information.

For Military duties or official Purdue representation (e.g., sports, arts, conferences), we require the respective notification letter emailed to the instructor(s) at least two weeks in advance. We dismiss notification letters sent post-missed deadlines.

Important Notes:

- We reserve the right to verify the authenticity of all paperwork for extension requests. Dishonesty will lead to disciplinary action.
- No extensions will be granted without approved notification from ODOS/PUSH/DRC.
- You are responsible for meeting deadlines in case of unapproved absences.

Technical Difficulties with Course Platforms

We utilize various software platforms (e.g., <u>Brightspace</u>, <u>Gradescope</u>, <u>Vocareum</u>, and <u>Ed Discussion</u>). These platforms may have occasional downtime due to maintenance, high traffic, or system failures. In such instances, adherence to the following protocol is essential:

- Immediate Notification: Promptly inform the instructor(s) and the team of CS instructional specialists by email about any technical issues. Provide clear evidence of the problem and a detailed record of the incident.
- 2. <u>Verification Process:</u> CS instructional specialists will investigate the issue by examining relevant logs to assess the situation's legitimacy.
- 3. <u>Instructor's Discretion:</u> Based on the instructional team's findings and the timing of the incident, the instructor(s) will decide on appropriate remedial actions (if any).
- 4. <u>Academic Integrity:</u> We treat false or frivolous reports of technical difficulties as academic dishonesty. Such instances will be reported to the <u>Office of Student Rights and Responsibilities</u>.

It's crucial to communicate any technical issues immediately (i.e., within 15 minutes of the incident) and accurately to ensure a fair and timely resolution.

Regrade Requests

To ensure clarity and fairness in the regrading process, adhere to the following guidelines:

- Ensure you have reviewed the solutions discussed in PSOs before submitting a request.
- Submit regrade requests for homework and midterms via Gradescope only. These will be open for 48 hours the day after releasing the respective grade. No request will be possible after this period.
- Only submit a regrade request if you believe there was a genuine discrepancy or misunderstanding in grading. Frivolous or excessive requests will incur a two-point penalty (meaning your score could go negative).
- A designated TA, occasionally more, will review your request after the regrade window closes.
- Limit your requests to no more than 2 per question to maintain fairness.
- Clearly explain the perceived grading discrepancy. This is not an opportunity to provide additional information beyond your original answer.
- Be patient, as regrade processing can take up to a week. If dissatisfied with the outcome, you may appeal to the Head TA.

Be aware that your entire homework or midterm may be re-evaluated, potentially affecting your overall score (i.e., your grade may go lower). Due to strict end-of-semester timelines, no regrade requests for the final exam will be considered. Attempts to solicit undue credit by appealing to the instructor(s) are considered academic dishonesty and will be reported to the Office of Student Rights and Responsibilities.

Academic Integrity

We abide by Purdue's <u>Academic Integrity</u> definitions and guidelines. All submissions and work are subject to checks for dishonesty through manual inspection, auxiliary material review, or detection software. Any student found to be dishonest will score zero on the respective assignment and must discuss the issue with the Academic Integrity TA(s) within a week of the grade release.

While all course activities are individual tasks, discussing with your study group the topics and strategies to solve the problems is allowed and encouraged. However, the work you submit must be entirely your own.

Penalties for dishonesty:

- First offense: Zero on the assignment and a letter grade deduction at the end of the semester.
- Second offense: Immediate failure of the course with an F grade, a report to the <u>Office of Student Rights and Responsibilities</u>, and notification to the Department of Computer Science.
- Dishonesty during midterms or the final exam: Immediate failure of the course with an F grade, a report to the Office of Student Rights and Responsibilities, and notification to the Department of Computer Science.

Remember, any instance of academic dishonesty will be reported as per the <u>Department of Computer Science Academic Integrity Policy</u>. Always strive for integrity in your work to maintain the course's fairness and your academic credibility.

Use of Artificial Intelligence Tools

As we navigate this revolutionary era of AI technology, it's crucial to understand its appropriate use within this course. While AI tools are powerful and can produce sophisticated results, some will be flawed. Professionals across job sectors are responsible for identifying such flawed results before using them. Not doing so constitutes professional dishonesty and a violation of corporate policies. Therefore, as a student aiming to become a professional, you must be held accountable when using AI tools in academic settings. Keep in mind that AI tools serve best as productivity enhancers, not replacements for human expertise (at least for now).

Critical skills like mathematical reasoning, logical thinking, and original creativity exceed Al's current capabilities. We focus on developing these critical human skills, particularly concerning data structures and algorithms.

We encourage using AI for personalized learning, such as generating clearer explanations or creating interesting examples for practice. However, using AI to complete course assessments undermines your learning experience and skill development and is considered academic dishonesty. Be aware of the inequity in access to various AI tools, some requiring payment. To ensure fairness, we'll compare your submissions against AI-generated solutions (using different AI tools, both free and paid versions).

Similarities, even incorrect ones, will be treated as potential academic dishonesty, and we will proceed accordingly.

Dependence on AI for tasks like coding might offer short-term gains but can jeopardize long-term success and understanding. Remember, AI tools won't be available during midterms and the final exam. Consider the broader implications of over-reliance on AI: you aim to be a skilled professional, not someone limited by the capabilities of these tools.

Here's something for you to think about: "Coding and mastery of AI tools can help you get a job, but not to keep it. You don't want to be the 'professional' proposing range queries on a hash table."

Grading Scheme

Component	Weight
Homework Assignments	15%
Programming Projects	15%
Quizzes	5%
Midterms	50%
Final Exam	15%

Grade Scale

We keep a record of the grades in Brightspace. We will determine the exact grading scale at the end of the semester. All final grades will be assigned systematically. The following final grade distribution is provided as a guideline:

A+	[99 - 100]
Α	[93 – 99)
A-	[90 – 93)
B+	[86 – 90)
В	[83 – 86)
B-	[80 - 83)
C+	[76 – 80)
C	[73 – 76)
D	[60 – 73)
F	[0 - 60)

The following standard will be used as a guide:

- A+, A: Superior performance in all aspects with work exemplifying the highest quality. Unquestionably prepared for courses building on CS251.
- A-: Superior performance in most aspects; high-quality work in the remainder. Prepared for courses building on CS251.

- B+: High-quality performance in all or most aspects. Considered prepared for courses building on CS251.
- B: High-quality performance in some; satisfactory performance in the remainder. Good chance of success in courses building on CS251.
- B-: Satisfactory performance. Evidence of sufficient learning to succeed in courses building on CS251.
- C+: Satisfactory performance in most of the course. Evidence of sufficient learning to succeed in courses building on CS251 with effort.
- C: Evidence of learning but generally marginal performance.
- D: Demonstrated minimal learning and poor performance in all aspects.
- F: Complete absence of evidence of learning.

IMPORTANT: Assume we will use the grade distribution above without modifications.

Incomplete Grades: According to the <u>Grades and Grade Reports</u> section B, No. 4. of Academic Regulations, "A grade of incomplete is a record of work that was interrupted by unavoidable absence or other causes beyond a student's control, which work was passing at the time it was interrupted and the completion of which does not require the student to repeat the course in order to obtain credit. The incomplete grade is not to be used as a substitute for a failing grade. The incomplete may also be used to delay the awarding of a grade in courses (e.g., self-paced courses, mastery courses, and practicums) the completion of which normally requires one semester, but the structure of which allows specified additional time. An instructor may consult with the dean of students to determine whether the circumstances may warrant a grade of incomplete."

We will consider Incomplete grades when all the following requirements are met:

- 1. The instructor(s) received the respective notification of verified evidence by ODOS, PUSH, or the DRC.
- 2. The student completed more than 75% of the coursework with satisfactory grades.
- 3. The student is in the path of a passing grade according to the Grade Distribution previously mentioned.
- 4. The student discussed the feasibility of an incomplete grade with the respective academic advisor. Instructor(s) must receive an email from the advisor indicating the discussion took place and that the student understands the request must satisfy all the mentioned requirements in this document.
- 5. The incomplete grade request is made at least two weeks before the last day of classes of the semester.

The instructor(s) reserve the right to consult with the dean of students about an incomplete request.

Students with approved Incomplete grade requests must finish the remaining coursework within two weeks after the last day of classes or the anticipated return date approved by ODOS.

Conduct, Courtesy, and Netiquette

To promote a respectful and inclusive online learning environment, adhere to the following principles:

- All perspectives are valuable. Engage in discussions with an open mind and a spirit of academic inquiry. Critique ideas, not individuals.
- Recognize our differences as enriching the learning experience, aligning with the University's nondiscrimination stance.
- Be mindful of how humor and sarcasm might be misinterpreted online and potentially disrupt the class's harmony.
- Monitor your participation to ensure everyone has an opportunity to contribute.
- Use respectful language and avoid offensive terms. Present your ideas in a professional manner.
- Be cautious with Internet language. Refrain from using all caps as it implies shouting.
- Avoid vernacular and slang, which might lead to misunderstandings.
- Keep an open mind and consider other viewpoints. Minority opinions are as important as popular ones.
- Reflect before sending a message. Think about how your words will be received.
- Welcome and seek feedback. Learning from diverse perspectives is a vital skill.

Ed Discussion

Ed Discussion is our platform for online discussion and inquiry. Here's how to make the most of it:

- Before your first post, familiarize yourself with the Netiquette section.
- Collaboration is encouraged. Answering questions and elaborating on topics enhances everyone's understanding.
- Consider this a chance to hone formal and technical communication skills, reflecting the collaborative spirit of the global computer science and software development community.

Don't expect immediate responses. Continue exploring your problem through course materials, online resources, or further debugging. You must emulate what professionals do: Seek answers actively, and if you find one, share it on Ed Discussion. This helps you and aids your peers who might face similar challenges.

You can post general questions about the topics, course assessment, programming, debugging, fundamental C++, or other relevant subjects. Remember, the most valuable online content often explains concepts broadly rather than providing narrow answers to specific questions.

All posts on Ed Discussion are moderated (i.e., each post must be approved) by the course staff to ensure adherence to course policies. Attempting to post unauthorized content will lead to disciplinary actions. TAs will respond to appropriate posts within 24 working hours (i.e., Monday to Friday, 9:00 AM to 5:00 PM EST). Also, do not expect replies during observed days and breaks. Remember that TAs are students and researchers with commitments, yet they are willing to assist you with your learning experience.

Posting code related to course assessments for review is not allowed. The moderators will not approve such posts. Posting is disabled on midterm days to accommodate varied exam schedules and will resume the next day. Ed Discussion will be entirely disabled during and after the Final Exam.

Your active, respectful, and constructive participation in Ed Discussion is a valuable part of your learning experience in this course.

Communication and Email Policy

To ensure efficient and appropriate communication within the course, please adhere to the following guidelines:

- Use Ed Discussion as the main channel for course-related inquiries. This includes questions about course content, assessments, regrade requests, or extension queries with approved notifications.
- Reserve email for private matters or to report absence notifications post-approval from ODOS.

Email Usage and Expectations:

- Emails not aligning with course policies or netiquette will not be addressed.
- Only emails from Purdue accounts will be considered to ensure security and authenticity.
- Due to the high email volumes received by the course staff, expect slower responses via email (i.e., longer than a week).
- Expect email responses during working times and days (i.e., Monday to Friday, 9:00 AM to 5:00 PM EST).
- Do not expect replies during observed days and breaks.
- For quicker replies, utilize private posts on Ed Discussion, but remember that the entire course staff can view these. So, be mindful of the nature of the information you give.

Attendance Policy

This course follows Purdue's academic regulations regarding attendance, which states that students are expected to be present for every meeting of the classes in which they are enrolled. When conflicts or absences can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency absences when advance notification to the instructor is not possible, the student should contact the instructor as soon as possible by email. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases falling under excused absence regulations, the student or the student's representative should contact or go to the Office of the Dean of Students website to complete appropriate forms for instructor notification. Under academic regulations, excused absences may be granted for cases of grief/bereavement, military service, jury duty, and parenting

leave. For details, see the <u>Academic Regulations & Student Conduct section</u> of the University Catalog website.

Accessibility

Ensuring that Purdue students have access to equitable learning experiences is a University-level commitment and is the responsibility of all members of the Purdue community. The Disability Resource Center (DRC) is a key partner in this work and is a resource for students and instructors.

The Student Services widget links to the DRC. Your syllabus or <u>Brightspace</u> Start Here may address your personal policy for making the learning experiences in your course as accessible as possible. The <u>DRC</u> <u>website</u> provides a sample syllabus statement as well as other <u>Instructor Resources</u> such as the <u>Usable Materials Center</u>. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone: 765-494-1247.

Purdue also offers resources to help you make learning materials accessible. Some examples include:

- Information from Innovative Learning on <u>Universal Design for Learning</u>, including guidance on <u>creating accessible documents</u>.
- Documentation on the <u>Purdue Brightspace website</u> on Accessibility and Accommodations, including how to check if your content on <u>Brightspace</u> is accessible.
- Check out the <u>DRC Instructor Resources</u> website for accommodations it provides (including when/how to request testing accommodations), and tips for creating accessible courses and materials.

Copyright

See the University Policies and Statements section of Brightspace for guidance on Use of Copyrighted Materials. Effective learning environments provide opportunities for students to reflect, explore new ideas, post opinions openly, and have the freedom to change those opinions over time. Students and instructors are the authors of the works they create in the learning environment. As authors, they own the copyright in their works subject only to the university's right to use those works for educational purposes Students may not copy, reproduce, or post to any other outlet (e.g., YouTube, Facebook, or other open media sources or websites) any work in which they are not the sole or joint author or have not obtained the permission of the author(s).

Nondiscrimination Statement

Purdue University is committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect

among its members; and encourages each individual to strive to reach his or her potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. A hyperlink to Purdue's full Nondiscrimination Policy Statement is included in our course Brightspace under University Policies and Statements.

Mental Health/Wellness Statement

If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try <u>WellTrack</u>. Sign in and find information and tools at your fingertips, available to you at any time.

If you need support and information about options and resources, please contact or see the <u>Office of the Dean of Students</u>. Call 765-494-1747. Hours of operation are M-F, 8 a.m.- 5 p.m.

If you find yourself struggling to find a healthy balance between academics, social life, stress, etc., sign up for free one-on-one virtual or in-person sessions with a <u>Purdue Wellness Coach at RecWell</u>. Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is free and can be done on BoilerConnect.

If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office on the second floor of the Purdue University Student Health Center (PUSH) during business hours.

Basic Needs Statement

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. There is no appointment needed and Student Support Services is available to serve students 8 a.m.-5 p.m. Monday through Friday.

Emergency Preparation Statement

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructors or TAs via email. You are expected to read your @purdue.edu email on a frequent basis.

Course Evaluation

Toward the end of this semester, you will be provided with an opportunity to give feedback on this course and your instructor(s). Purdue uses an online course evaluation system. You will receive an official email from evaluation administrators with a link to the online evaluation site and will receive a prompt to complete the survey when you login to Brightspace. Your participation is an integral part of this course, and your feedback is vital to improving education at Purdue University. I strongly urge you to participate in the evaluation system.

Disclaimer

This syllabus is subject to change. You will be notified of any changes as far in advance as possible via an announcement on Brightspace. Monitor your Purdue email daily for updates.