Cal Poly Humboldt Course Syllabus for CS 328 - Section 10 Web Apps Using Databases CRN 22205 - Spring 2025

Lecture meets:	Mondays and Wednesdays, 3:00 - 4:20 pm	SH 108
Lab Section 11 meets:	Thursdays, 3:00 - 4:50 pm	BSS 313
Lab Section 12 meets:	Fridays, 3:00 - 4:50 pm	BSS 313

Instructor:	Sharon Tuttle	
Instructor's e-mail:	st10@humboldt.edu or sharon.tuttle@humboldt.edu or smtuttle@humboldt.edu	(note: these are all ALIASES to the SAME mailbox)
Instructor's office:	BSS 322	(3rd floor, in one of the corners furthest from the elevator)
Student hours:	M: 10:00 am - 11:00 am W: 10:00 am - 11:30 am Th: 10:00 am - 11:00 am F: 10:00 am - 11:30 am	(Plan: I'll be in BSS 322, but also have a Zoom session running from there if you prefer to use that)
	or by appointment	(Zoom link: see course Canvas site)
Course public web site:	follow CS 328 link from: https://nrs-projects.humboldt.edu/~st10/ OR follow link from course Canvas site	

Course Description

From the Humboldt catalog: Building applications atop databases. N-tiered architecture; database tier: stored procedures/functions; presentation tier: web GUIs; application tier: controlling web-to-database interactions.

This course covers the fundamentals of programming web applications with a database component, that is, the development of web applications using a relational database as a source and sink of data. Topics include introductions to PL/SQL, HTML, CSS, PHP, and client-side JavaScript.

(Note that I am assuming that those taking this course are very comfortable with SQL and C++; prior knowledge of PL/SQL, PHP, HTML, CSS, and Javascript is **not** assumed.)

Course Prerequisite:

CS 325 - Database Design

or instructor approval.

Student Learning Outcomes:

After successfully completing this course, students should be able to: *

- understand the differences between the tiers within an n-tiered architecture and the tradeoffs in components of a system being placed within those different tiers;
- design usable and accessible web applications that use a database as their sink and source of data;
- design and implement effective SQL queries to be embedded within web applications to query and manipulate database data effectively;
- illustrate how interactive client-server web applications that interact with a database can be built using several different types of Web technologies;
- demonstrate how to implement a database-driven web site, explaining the relevant technologies involved in each tier of the architecture and the accompanying performance tradeoffs.

CS Program Learning Outcomes that this course addresses:

This course addresses departmental learning outcomes of:

- Computational Thinking
- Self-Directed Learning
- Technical Writing
- Communicating and Collaborating

This course addresses computational thinking at a moderate to advanced level, adding the concept of applications using ntiered architectures. It addresses self-directed learning at a moderate level by encouraging students to practice searching software documentation to expand their skills beyond the quick introductions to the various languages used in this course. It addresses technical writing and communicating at a moderate level via the topics of design of the presentation tier and design for usability.

Cal Poly Humboldt Learning Outcomes that this course addresses:

This course contributes to Cal Poly Humboldt learning outcomes (<u>https://academicprograms.humboldt.edu/content/undergraduate-institutional-learning-outcomes</u>) of:

- Critical Thinking
- Information Literacy
- Written Communication

Required Course Materials:

We will be using the zyBooks Web Programming textbook this semester.

- Once this is connected to Canvas, you should click on **any course zyBooks assignment link** *in Canvas* to then subscribe to this text. (Do **NOT** go to the zyBooks website and create a new account.)
 - A subscription is \$64. Students may begin subscribing on January 6, 2025 and the cutoff to subscribe is May 1, 2025. Subscriptions will last until May 30, 2025.
- Turning Account License used with TurningPoint app (see "Clicker Questions" section below)
 - The PointSolutions app is free, but you do need to purchase a Turning Account License and register it from the CS 328 course Canvas site, or I will not be able to "see" your answers.
 - (If you purchased a multi-semester license in Fall 2024, you should just need to register that from the CS 328 course Canvas site.)

^{*} Some of these are adapted from the ACM Computer Science Curriculum 2001, available from link at: <u>http://www.acm.org/education/curricula-recommendations</u>

- Note: I am told that the best price for the Turning Account License is available when you follow the "Turning Account Registration" link in Canvas -- this link is on the left-hand-side of the course Canvas site.
- Any additional required readings will be made available either on-line, or via resources available through the Cal Poly Humboldt Library such as the ACM Digital Library and O'Reilly Learning.

Course Software:

We primarily will be using an **Oracle implementation of SQL** for this course. Unless noted otherwise, you are expected to use the on-campus student Oracle database for course assignments, and exam questions involving SQL will be assumed to use Oracle SQL as well. The software you use for any additional practice is, of course, up to you.

Note that you can access the Humboldt Oracle student database from on-campus using

nrs-projects-ssh.humboldt.edu. (From off-campus, you will need to set up and use Humboldt's GlobalProtect VPN (Virtual Private Network). Instructions for this will be provided.)

Throughout the semester, you will be making some use of the LINUX operating system on nrs-projects. Note that you may access nrs-projects-ssh.humboldt.edu by using the programs ssh (secure shell) and sftp (secure ftp), although, again, you will need to use Humboldt's GlobalProtect VPN to do so from off-campus. Instructions for using ssh and sftp to connect to nrs-projects-ssh will also be provided.

Campus labs have software that includes implementations of ssh and sftp. Also, command-line versions of ssh and sftp (usable from a terminal window) are installed already as part of Mac OS X and most bash implementations.

Oracle PL/SQL is available via your Oracle student database account. We will be using HTML, CSS, PHP, and some client-side JavaScript as well.

Grading Breakdown

If you are a Computer Science (CS) or Software Engineering (SE) major, note that you must earn at least a C- in CS 328 for this course to count towards your major.

Your semester grade will be determined by the percentage of points that you earn in five grading categories, **subject to some minimum requirements**. Here are those grading categories and their grade percentages, followed by those minimum requirements:

Homework assignments:		25%	Note: NO homework grades are dropped
Lab exercises:		15%	Note: Lowest two lab exercise grades are dropped
Clicker questions:		10%	Sum of points earned from answering clicker questions, up to a maximum of 120 points
zyBooks activities:		15%	Questions and exercises from the zyBooks course text
Exams:	Exam 1:	10%	Wednesday, March 5
	Exam 2:	10%	Wednesday, April 16
	Final Exam:	15%	Monday, May 12, 3:00 - 4:50 pm in SH 108
			NOTE this time and date BEFORE making your end-of-semester travel plans!

In addition, the instructor may, at their discretion, issue a non-passing semester grade for the course if:

- the semester average for Homework assignments falls below 60%, or
- the semester average for the three course Exams falls below 60%

That is, if either of the above minimum requirements is not met, then a semester grade of D or F may be assigned, even if the overall grade average is above 70%.

The purpose of these minimum requirements is to prohibit the practice of simply ignoring part of the course requirements with the thinking that the other parts will be enough to pass.

- In particular, exams are intended to give you an opportunity to demonstrate that you understand at least a minimal reasonable level of the most important course concepts.
- And, because there are hands-on skills that are part of this course that are not tested as effectively on exams, homeworks are intended to give you an opportunity to demonstrate at least a minimal level of programming experience in addition to course concept mastery.
 - (Also, part experience has shown that, in general, students who do not put a solid effort into course homework assignments do not do well on course exams.)

Participation in all aspects of the course must be maintained at acceptable levels in order to learn this material!

Overall Percentage (based on the given weights)	Exams Average	Homework Average	Letter Grade
>= 93	>= 60	>= 60	A
>= 90 and < 93	>= 60	>= 60	A-
>= 87 and < 90	>= 60	>= 60	B+
>= 83 and < 87	>= 60	>= 60	В
>= 80 and < 83	>= 60	>= 60	B-
>= 77 and < 80	>= 60	>= 60	C+
>= 73 and < 77	>= 60	>= 60	С
>= 70 and < 73	>= 60	>= 60	C-
			1_
>= 70	< 60	any	D+
>= 70	any	< 60	D+
>= 67 and < 70	any	any	D+
>= 60 and < 67	any	any	D
< 60	any	any	F

So, your semester grade will be computed as shown in this table:

WAIT -- where's the Semester Project?!

- Instead of being a separate grading category, the pieces to what might be considered the semester project are included as homework problems and lab exercises.
- You will be building upon either your CS 325 project database or upon another database that you choose. I will be asking during the first week of the semester if you are willing to provide a copy of your CS 325 database for other students to build upon.

More Coursework-related Policies

• It is nearly impossible to write unambiguous specifications. If you have questions about what is being asked for -- whether on a homework problem, in a lab exercise, on an exam question, or even for a clicker question -- you are expected to **ask** me.

- Being able to ask such questions is a necessary and important real-world skill in computer science!
- There is more to a computer command, expression, statement, function, file, or program than simply whether it "runs".
 - Part of your grade may be determined by how well your work meets the stated requirements.

Your work is expected to meet stated requirements precisely. When working as part of a team on larger software projects, following specifications precisely is vital, and can mean the difference between a working product and one that just sits there.

Work that is too far from meeting the stated requirements may be returned to you ungraded/not accepted for credit.

 Work may be graded on style as well -- following style and coding standards likewise helps to result in programs that are more readable, understandable, and maintainable over time. Discussions on style will be ongoing throughout the semester.

Homework Assignments

- Note that **no homework assignment grades are dropped**; *every* homework assignment grade is included in determining the homework portion of your semester grade. Every homework includes important practice of course fundamentals.
- Homework problems are to be completed individually (although *discussing* homework problems with other students without copying their comments or code is fine!).
- Each homework assignment must be submitted as specified on its handout to be accepted for credit. This may vary for different homework assignments.
- Each homework assignment will be clearly marked with one or more due dates/deadlines (a single homework assignment could have multiple parts with multiple due dates/deadlines).
 - To best benefit from this class, it is important to practice course concepts regularly and to attempt homework problems before the homework deadlines.
 - If I notice that a class member is not submitting attempts at homework problems on a timely and regular basis, I may e-mail that class member and require that they set up a meeting with me to discuss this.
 - If you have submitted initial attempts at some of a homework's problems by its deadline, you can still submit
 versions for other of its problems and improved versions of its problems up until example solutions are posted,
 before each Exam.
 - Once a homework's example solutions are posted, no more submissions or revisions will be accepted for that
 homework's problems (*unless* you have discussed your unusual situation with me and we have set up a different
 arrangement).
- You may submit **multiple versions** of homework files and problems; I will grade the **most recent able-to-be-accepted** submission unless you inform me otherwise.
 - One reason for encouraging multiple submissions is to encourage you to **turn work in early and regularly**, even perhaps while it is still in-progress, since you can always turn in an improved version later, or if further inspiration strikes, etc.
 - Another benefit of early and regular submissions as you work through homework problems: you don't have to worry about forgetting to submit something that has already been submitted!

Lab Exercises

- Graded lab exercises, typically preceded by review and/or lab-exercise-related clicker questions, will be given during most lab sessions.
- Unless noted otherwise in a particular week's lab exercise:
 - You must be in the BSS 313 lab during your lab session to be able to receive credit for that week's lab exercise.
 - When a lab exercise specifies that pair-programming is to be used, you must participate appropriately in a pair in

BSS 313 during your lab session to be able to receive credit for that week's lab exercise.

- (...unless you have contacted me by e-mail regarding extenuating circumstance and have received permission to complete a particular week's lab exercise individually and/or elsewhere.)
- If you miss a lab session, typically its clicker questions and graded lab exercise cannot be made up later (except for extenuating circumstances please let me know!). However, the **two lowest lab exercise grades** will be dropped from the lab exercise portion of your semester grade.
- You will typically be **pair programming** for lab exercises -- in pair programming, two programmers work on and view the same file at the same time, one typing and the other saying what to type, both looking at the **same** screen, and both also discussing along the way.
 - Both are actively involved in the programming process together.
 - This software engineering practice can result in programs with fewer errors, amongst other potential benefits.
 - While learning new programming concepts and syntax, this practice can also give you more chances to discuss course concepts with other students.
 - (It also has a practical benefit of reducing the total number of questions the instructor has to try to answer during lab sessions, potentially also reducing your wait time for those answers.)
- Note: if, for example, there is an odd number of students at a particular lab, or there are technical difficulties, we'll also sometimes have trios -- in that case, **all three** are still working on and viewing the same file at the same time, one programmer typing, and the other two alternate saying what to type, and of course all are still also discussing along the way.
- It is **not acceptable** to simply sit back during a lab exercise and have your partner do all the typing and saying what to type and discussing -- you are expected to **actively participate** in your pair.
 - Likewise, it is not acceptable to work on the lab exercise *individually* before starting to work in a pair.
- Please let me know of any issues that come up related to pair programming, so we can work together to come up with means for dealing with them.
- Once you have completed a lab session's lab exercise, made sure that both of you have a copy of its files, and submitted your copy of those files, it is acceptable to leave the lab session.
 - After completing and submitting the lab exercise, it is also fine to use the remaining lab time to work on the current course homework assignment, to practice course concepts, and/or to ask questions about course-related topics.
 - However, note that questions from those still working on the lab exercise will be prioritized!

zyBooks Activities

We will be using a zyBooks text for this course this semester -- you will receive credit for questions and activities that you complete from assigned text sections. These assignments should be accessed through the course Canvas site. These should be automatically graded, with the scores then being automatically put into the Canvas gradebook.

Ideally, you read and complete these for a topic's section(s) *before* we discuss that topic in class. But I plan to set up the deadlines such that you can still work on them up until the exam covering that topic.

Clicker Questions

We will be using the Echo360 (formerly Turning Technologies) PointSolutions student response software in class. There is significant literature indicating that using such so-called "clicker questions" may increase student engagement and success in learning.

Students purchase a Turning Account license/subscription and register it from the CS 328 course Canvas site, and they use this license with the TurningPoint application on a mobile device or from a web browser. You then will answer questions using this during **every** class meeting (lectures **AND** labs). (Part of the idea here is to stress that **every** class meeting is important, and that participating during **every** class meeting is important.)

Follow the "Turning Account Registration" link on the course Canvas site for registering so that your answers receive

credit. (If you do not still have a current Turning Account license, you can also purchase a license via this link, and I am told they offer the best price for this.)

This software will be used for in-class questions, which might be asked at any time within class meetings. These will usually be given in a **think-pair-share** fashion, in which you answer a question first on your own, and then discuss your answer with other students, discussing **why** you think your answer is correct; if they gave a different answer, you try to persuade them that yours is the correct answer, and then either of you can change your answer if you wish. The response system will record the overall class response percentages as well as keep track of individual answers.

Note that a large part of the benefit of this is from these discussions with other class members -- research suggests both that putting concepts into your own words helps you to learn them better and that the other class member's explanations may also help you to learn them better.

Typically, you will receive:

- 1.5 points for a correct answer,
- 0.75 points for an incorrect answer, and
- **0 points** for no answer,
- but with a maximum-possible semester clicker-questions grade of 120.
- (There may be some no-point questions from time-to-time as well -- these will be noted if/when they come up.)

Thus you will be rewarded for regular attendance and participation.

I hope to run tests of the system during the first week's class meetings, and to begin asking questions that "count" during the second week's class meetings. So, you need to purchase and register your license as soon as possible. If there is an issue with this, please let me know as soon as possible.

Finally, **NOTE** that use of another CS 328 student's account, or having someone else use your TurningPoint account in a CS 328 class session, or otherwise having anyone but yourself answering a clicker question on your behalf -- that is, pretending that someone is in class who actually is not -- is considered to be **cheating**, with the same policies applying as would be the case if you turned in someone else's work as your own or permitted someone else to copy your work. Please **ASK ME** if you are not sure what I mean by this.

Can clicker questions be "made up" outside of class sessions/lab sessions?

The general rule is that, if you miss a class session, you miss that day's clicker questions, and in general cannot make them up. (But I am willing to discuss alternate arrangements for extenuating circumstances -- contact me sooner rather than later if you would like to discuss such possibilities!)

There will be a sufficient number of questions asked during the semester (at least 120 points worth of questions) to allow for both the possibility of extra credit (up to a **maximum** clicker grade of **120**) or to make up for a class session that you miss (although note that you are still responsible for finding out what you missed on such days).

Exams

There will be two exams during the semester and a Final Exam, at the dates given below.

Make-up exams are only possible by special prior arrangement or because of extenuating circumstances. You are expected to **contact me as soon as reasonably possible** in such circumstances.

There will be a review session before each of these exams as noted in the Tentative Course Schedule section.

Exam 1:

Exam 1 will be given during class on Wednesday, March 5 in SH 108.

Exam 2:

Exam 2 will be given during class on Wednesday, April 16 in SH 108.

Final Exam: NOTE this time and date **BEFORE** making your end-of-semester travel plans:

The Final Exam will be given in SH 108 from 3:00 - 4:50 pm on Monday, May 12. (This is the required date and time specified in the campus Final Exam schedule for a course that meets at 3:00 pm on Mondays and Wednesdays.)

NOTE: You can also find the schedule for ALL of YOUR Final Exams in your Student Center! See: https://studentcenterhelp.humboldt.edu/final-exam-schedule

IMPORTANT COVID-Related Information

NOTE: This information is subject to change at any time as the university responds to the changing profile of COVID. It is the student's responsibility to be current on all university regulations regarding COVID as they are changed and updated.

Students are required to comply with all university regulations regarding COVID.

Testing Positive

If you test positive for COVID, you should not come to class. You should notify me (and your other face-to-face course instructors), and follow campus Health Center and/or your medical provider's advice regarding when to return to class.

Please notify me again when you have recovered so that we can make a plan for you to get caught up with the class.

Thank you for your cooperation to keep everyone safe and our course on track this semester!

Other Expectations of the Student

- Read this syllabus, and be prepared to verify in a required Canvas activity that you have received it, have read it, and understand its contents.
- Attend all class sessions, and participate! Participating includes:
 - paying attention
 - discussing clicker question answers and class concepts with other students
 - being an attentive partner when pair-programming in lab
 - asking questions
- There is a general rule-of-thumb for college-level courses:

To be successful in a course, you should plan to spend at least 2 hours outside of class for each 1 hour of college course credit. That implies an estimate of **at least 8 hours a week spent outside of class for this 4-credit course.** In addition:

In addition:

- This is a junior-level CS and SE major course; it has an accordingly-rigorous workload. It involves a large amount of programming at different tiers.
- One cannot learn how to develop systems coordinating code at different tiers without practice!
 - This should include **typing in and playing around with in-class examples**, experimenting to see if something you are curious about really works like you think, doing further research on topics of interest, and so on.
- Complete reading assignments and zyBooks text activities in a timely fashion. Ask me if you have any questions about them.
- Check the CS 328 public course website and Canvas course site **frequently** for homework and other assignments, postings of course handouts and in-class examples, announcements, and updates.
- Check your Cal Poly Humboldt e-mail daily Monday through Friday.
 - All e-mails that I send for this course will include CS 328 in their Subject: line.
 - Likewise, include CS 328 along with a description of your e-mail in the Subject: line of all class-related emails that you send to me.

- Start working on homework assignments as soon as they are posted, submitting frequently. This gives you time to ask questions if you run into problems.
 - Why spend 4 hours struggling with a frustrating roadblock the night before the homework assignment is due, when you can spend 10 minutes composing an e-mail early in the week, work on other problems while waiting for the answer, and then get a reply that makes everything clearer as soon as you read it?
- Ask questions when you are having difficulty understanding a class concept or not making progress on a homework problem.
 - Ask questions early and often (I will gently let you know if you are overdoing it.)
 - Debugging programs can be a notorious time-eater. Debugging on multiple tiers does not make this less timeconsuming! Sometimes a very small issue can take a long time to locate and fix, especially if you do not ask for help.
 - Later concepts are built upon earlier concepts as the course progresses -- if you ask as soon as you realize that some concept is not clear to you, that can help keep you from falling behind.
- Keep backups of your CS 328 files; if I cannot open one of your submitted lab exercise or homework files, I may need you to re-submit it or to e-mail it to me.
- If you have not completed a lab exercise or homework problem by its deadline, submit whatever you have done up to that point, even if it is not complete.
 - Remember, as noted earlier in this syllabus, that, for homeworks, submitting *something* by the deadline gives you
 the possibility of submitting improved versions and attempts at other of its problems after the deadline, up until
 example solutions are posted, before each Exam.
 - Submitting what you have by the deadline shows that you have started, and *might* allow for feedback based on what you have done so far.
 - I believe in partial credit on homeworks, believing that if you have at least started working on a problem, any eventual posted example solution will be more helpful/understandable than if you have not.
- Take the opportunity to learn how to write your own thoughts; don't plagiarize. Be sure to give credit where credit is due and cite your sources.
- If example solutions for selected homework problems are posted, read those over and compare them to how you approached those problems. Be sure to ask me if you have any questions as a result!
- When grades are posted to the course Canvas website, check them and let me know about any discrepancies or issues.

Class Culture*

We will decide on the final expectations together, but some of the guiding principles will involve:

- Respect for each other (what does that mean to you?)
- Come to class sober
- · Avoid non-class-related cell phone and laptop use during class
- Be in the classroom before class starts, so that you're ready when it starts
- If you need to leave in the middle of class, do so as quietly and unobtrusively as you can
- Stay until class is over
- Be a regular and willing participant
- *Contact the instructor if you need special accommodation or exception from these rules.

Expectations of the Instructor

• I will prepare and review course materials to be as current and accurate as possible.

- I will be available to answer questions or issues that may arise for you during this course. Expect a 24-hour turnaround time for response to e-mails on weekdays and 48 hours on weekends.
- I will try to the best of my ability to prepare you for the assignments and other assessments in this course.
- I will utilize fair and honest evaluation techniques for each assignment required for this course.
- I will do my best to address the needs of a diverse range of learning styles in this course.
- I will only share your student information per FERPA (federal privacy) guidelines.

Other Course Policies

Inclusivity

Students in this class are encouraged to speak up and participate in-class. Each of us must show respect for each other because our class represents a diversity of beliefs, backgrounds, and experiences. I believe that this is what will enrich all of our experiences together. I recognize that our individual differences can deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences.

If you feel your differences may in some way isolate you from our classroom community or if you have a specific need, please speak with me early in the semester so that we can work together to help you become an active and engaged member of our class and community. (Adapted from Cal Poly Humboldt Canvas Accessible Syllabus Template, which was in turn adapted from CSU Chico and Winona State University)

Thus, spoken language and body language should emanate respect for everyone in our classroom community. This includes coming to class on time and being prepared to listen and share. (*Adapted from Jayne McGuire's syllabi language*)

CS 328 E-mail Policies

- NOTE: do NOT use Canvas messages to contact me or ask me a question -- send me actual e-mail messages instead. Handling Canvas messages is time-consuming and error-prone on my end.
 - Please ASK me if you are not sure what I mean by this.
- Students are responsible for checking their Cal Poly Humboldt e-mail account for official communications. You are expected to check for course-related messages as well.
 - While students may elect to redirect messages sent to their official Cal Poly Humboldt e-mail address to another address, those who redirect their e-mail to another address do so at their own risk.
 - Cal Poly Humboldt E-mail Policy: <u>https://policy.humboldt.edu/p21-01-email-policy</u>
- All e-mails that I send for this course will include CS 328 in their Subject: line.
- Likewise, include CS 328 along with a description of your e-mail in the Subject: line of all class-related e-mails that you send to me.
 - This will help your e-mail be more recognizable as a class-related message, and will make it less likely that I will
 accidentally overlook it.
- ALSO include a descriptive subject along with the CS 328 in that Subject: line -- this also increases the chances that I will notice and reply to your question more promptly.
 - (In particular, do not just reply to a class e-mail message I have sent previously, and do not simply leave the Subject: line blank!)
- Ask **specific** questions via e-mail -- for less-specific or broader questions, come to student hours or make an appointment to meet with me. Overly-vague or broad questions are problematic to answer by e-mail.
 - For example, an example of a **specific** question is:

"When I try to run the attached PHP document (attach the file) from the URL: (paste in the URL), I receive the

following error message: (paste in the error message).

Can you point me in the right direction about what might be the issue here?"

- An example of an overly-vague or broad question is:
 - "Here's my PL/SQL script/HTML file/CSS file/PHP file/JavaScript file/etc. Is it right?"
- When e-mailing a question about a program,
 - attach a copy of your program file(s)

and ALSO

- paste in the first 4-5 lines of any error messages you are getting

and/or descriptions of bizarre behavior you are seeing.

- It is perfectly reasonable if you e-mail me a specific question and then happen to find out the answer yourself before you receive my answer. (Letting me know you've found the answer is fine, too!)
- Likewise, it is not a problem if you happen to send me several specific questions in separate e-mails (for example, as you work on different homework problems while awaiting earlier answers). I can answer shorter e-mails more quickly than longer e-mails.
- Expect a 24-hour turnaround time for response to e-mails on weekdays and 48 hours on weekends.
 - So, in general, if I have not replied to your e-mail within 24 hours, please **re-send** it, just in case I have overlooked it or some glitch occurred.
 - (And if there seems to be a chance that your message is getting chomped by a spam filter -- rare, but not unprecedented! -- leave me a message at 707-826-3381 with the Subject: line of the e-mail you are trying to send and the e-mail address you are using, and I will see if I have indeed received it!)
- You are expected to **sign** each e-mail you send me with **your name** -- sometimes the sender's identity is not obvious from one's e-mail address, especially for an off-campus e-mail address.
- Please take a few minutes to ensure that your message reflects a professional tone. I know I have sent an e-mail or two in the heat of the moment that I soon regretted. Take your time and communicate professionally. (*Adapted from Jayne McGuire's syllabi language*)

Course Absences

Between the ample quantity of clicker questions asked during the semester, and the two dropped lab exercise grades, you can be absent several times from non-exam lecture or lab sessions without significant direct penalty, for whatever reason. However, it is **your responsibility** to find out what was announced and covered on those days; "I wasn't there that time" is not an acceptable excuse.

Please let me know if class or life issues are making it difficult for you to attend class meetings or to keep up with course material and coursework, so we can make arrangements to help you work through those. It helps if you let me know **sooner** rather than later about such issues!

Academic Honesty, Plagiarism, and Generative AI Tools

Students are responsible for knowing Humboldt's Student Academic Honesty Procedure policy, available at:

https://www2.humboldt.edu/studentrights/academic-honesty

Plagiarism is a serious offense. Copying of another person's work and submitting it as your own for individual assignments, or providing your work to others for them to copy and submit as their own for such assignments, is not acceptable.

Among the actions that are **unacceptable** are submitting another's program, code, or file as your own; giving programs, code, or files to another; and failing to quote material (that includes algorithms, project, code, and comments, too!) taken from another source. This applies to comments as well as actual executing code.

Likewise, it is NOT okay to copy or post homework answers or code from or to an online discussion, or from or to sites

such as Chegg.

Generative artificial intelligence (AI) programs, such as Copilot and ChatGPT, may **not** be used for any work or assignments required in this course. The use of generative AI programs defeats the writing requirements and critical thinking skills that are vital to achieving CS 328's learning outcomes. Submission of partial or complete work from generative AI programs is not permitted and will be treated as plagiarism as defined in Humboldt's Student Academic Honesty Procedure, and handled in accordance with that Procedure. (*Adapted from Humboldt's Center for Teaching & Learning's "Artificial Intelligence Sample Syllabus Statements AY23-24"*)

Learning takes hard work; when students turn in others' work as their own, or provide it to others to copy, it is a slap in the face to those seriously interested in learning who are putting in that effort. Not turning in an assignment results in no credit for that assignment, but that is an honest grade.

Evidence of copying or plagiarism will result in appropriate penalties, up to and including a failing grade in the course.

All of the above said, also note the following:

- In the case of pair programming during weekly lab sessions, you are *intended* to work together, with one student typing the code while all team members collaborate, to create files that then include *all* of your names. This should mean that you all *participated* in pair-programming for that assignment. This is the ONLY authorized exception to the above policy! (*Adapted from David Tuttle's CS 112 Syllabus*)
- Did you find an interesting inspiration from a Google search or from a book for your algorithm or for a part of your code? Attribute it -- include a comment giving its source! Then you are *not* "failing to quote material ... taken from another source". (And, of course, *adapt* it to meet class coding and style standards as well as the needs of the particular program.)
- Note that it is fine and *encouraged* to make use of functions and example code from posted in-class examples, but it is professional to comment their source as well. (For CS 328 purposes, this can be as simple as "from posted CS 328 examples", for example.)

Note that it is **your** responsibility to ensure that your homework files are read-protected. If you are careless about this, and someone else copies your work, you will share the penalty. (In particular, be very careful about leaving work on shared network drives, or in Linux directories that are not read-protected.)

Is is OK to help each other?

On exams, no. (That said, studying together for each exam, before taking it, is an excellent idea and encouraged!)

For homework assignments, discussing approaches to homework problems is fine -- a good rule-of-thumb is that you are discussing approaches but not writing down or copying how to complete a particular problem.

Students may also help one another in determining causes of homework problem bugs, or in determining the meaning of error messages.

However -- again -- any copying or modifying of someone else's answers, source code, or files, OR of providing answers, source code, or files to another, related to homework assignments and exams is definitely over the line, and never justified.

More on Asking Questions/Getting Help

- You are encouraged to ask questions in class, in student hours, and by e-mail. The most successful students are those who are not afraid to ask questions early and often (I will gently let you know if you are overdoing it).
- Especially with regard to homework assignments, it is usually better to ask a question sooner than later.
 - For example, it is better to send an e-mail with a specific question you have about a problem as soon as you think of it, rather than wait a day or two until the next class meeting or student hour.
 - If you wait to ask such questions, you might not have time to complete the assignment.

Incompletes

Incompletes are rarely given and only in the case of a true emergency. They are not appropriate for students who find they

have fallen behind on assignments, missed a test, or taken on too much academic, work, or family responsibilities. For these situations, dropping the course would be appropriate (**if** that is still possible according to the University policies for dropping courses).

If you are facing extenuating or emergency circumstances at any time during the semester, please consider contacting the Cal Poly Humboldt Campus Assistance, Response, and Engagement (CARE) Services office:

https://deanofstudents.humboldt.edu/CARE

Campus policies

The following leads to useful links regarding Cal Poly Humboldt policies, procedures, and resources:

https://academicprograms.humboldt.edu/content/syllabus-addendum

All of the policies linked from the above are applicable to this class, and you are expected to be familiar with these policies.

The following are just a FEW highlights from this site, along with a few additional campus-policy-related notes:

Campus Disability Resource Center (CDRC)

Persons who wish to request disability-related accommodations should contact the **Campus Disability Resource Center** in Library 005, by phone at **707-826-4678**, or by email at **student504@humboldt.edu**. Disability accommodations must be pre-approved by the Campus Disability Resource Center.

Your classrooms should be equipped with at least one desk and chair for students with disabilities or temporary physical challenges. Ensure that students who need this equipment are able to use it - if you are not physically challenged yourself, select another seat in the classroom.

Additional information is available on the Campus Disability Resource Center (CDRC) website:

https://www.humboldt.edu/cdrc

Please note that some accommodations may take up to several weeks to arrange. If you are eligible for such accommodations, please contact me as soon as possible to discuss them. Note that the CDRC no longer sends information about student accommodations directly to faculty -- Accommodation Memorandums (AMs) are sent directly to students, who may then forward them to faculty as they choose.

Dropping or Adding a Class

- Students are responsible for knowing the University policy, procedures, and schedule for dropping or adding classes.
 - You can find these deadlines for Spring 2025 in the "Activities and Deadlines" calendar for Spring 2025, available at:

https://www.humboldt.edu/sites/default/files/registrar/2025-01/adspring2025draft7.pdf

(There are MANY important deadlines in this calendar -- it is well-worth reading through!)

- In case the link above changes, here is an alternate path:

go to: <u>https://www.humboldt.edu/featured-events</u>

and scroll down to "More Calendars"

in the "Activities and Deadlines" center column

and click the "Spring 2025" link!

- Note that the Add/Drop deadline for Spring 2025 is 11:59 pm on MONDAY, FEBRUARY 3.
 - This is the deadline to add a course with a permission number or to drop a course through the Student Center.
 - After February 3, courses cannot be dropped. Withdrawing from a course after this date requires a documented "serious and compelling reason", and it is the **Registrar's Office** that determines what constitutes such a reason.
 - Note that it is the student's responsibility to properly drop a course.

• You can also find more information about dropping or adding a class at:

<u>https://registrar.humboldt.edu/forms</u> - and click on Add/Drop Date on the right-hand side (OR toward the BOTTOM if viewing this on a phone or within a narrow browser window!)

• You can find the University policies for repeating classes at:

<u>https://registrar.humboldt.edu/forms#policies</u> - and click on **Repeating Courses** on the right-hand side (OR toward the BOTTOM if viewing this on a phone or within a narrow browser window!)

Note about Course Grade Modes

Note that courses applying to CS major/minor or SE major requirements must be taken with a grade mode of **letter grade** (that is, NOT with a grade mode of CR/NC, credit/no credit).

If you are taking this course as a **free** elective, however (and **not** applying it to a CS major or a CS minor or an SE major), then note that there is a limit of **at most one optional CR/NC course per term**, and that, for Spring 2025, the deadline to change grade modes is **Monday**, April 14.

For more information on optional CR/NC grade mode, see:

<u>https://registrar.humboldt.edu/node/407</u> - and click on **Credit Limitations** on the right-hand side (OR toward the BOTTOM if viewing this on a phone or within a narrow browser window!), and within that scroll down to the **Credit/No Credit** section within.

Attendance and disruptive behavior:

Students are responsible for knowing policy regarding attendance and disruptive behavior:

https://www2.humboldt.edu/studentrights/attendance-behavior

- Class disruption: University policy requires that instructors eliminate disruptions to the educational process. Distractions such as excess talking or behaviors that disrupt the class are not acceptable.
 - Students indulging in such behaviors will first be warned before any additional measures are taken (although a warning is not required in the case of abusive behavior).

In Case of Emergency:

Adapted from "Earthquake Resources for HSU Faculty and Staff", by the Cal Poly Humboldt Geology Department: IN THE EVENT OF AN EARTHQUAKE:

- DROP AND COVER YOUR HEAD, AS BEST YOU CAN.
- DO NOT RUN, JUMP OVER SEATS, PUSH ANYONE, OR HEAD FOR THE DOORWAY.
- STAY WHERE YOU ARE UNTIL THE SHAKING STOPS.
- WE WILL CALMLY AND QUICKLY EXIT THE CLASSROOM/LAB AND ASSEMBLE AT OUR ASSIGNED EMERGENCY ASSEMBLY POINT (EAP).
- Download the MyShake app on your smartphone so that you can receive earthquake alerts from the earthquake early warning system.

Want to read more from this excellent resource? Here is a link (provided with permission from Professor Melanie Michalak):

https://docs.google.com/document/d/1_TeV_SoN2M7jqUyOVQPdSsw5jndGMY1zuCJroFUF8zM

More generally:

Emergency Information

Please review the evacuation plan for the classroom (posted on the orange signs). During an emergency, information regarding campus conditions can be found at **707-826-INFO** or:

https://www.humboldt.edu/emergency

TENTATIVE Course Schedule: (subject to change with fair notice)

• Note also that additional readings may be added to those given below.

Week 1: January 22, 23/24

- (NOTE: Humboldt Martin Luther King, Jr. Holiday was Monday, January 20)
- Topics: Intro to course; Clicker tests; Intro to n-tiered architectures
- Homework 1 out

Week 2: January 27, 29, 30/31

- Topics: CLIENT-TIER: start intro to strict-style HTML
- Homework 1 due 11:59 pm Friday, January 31
- Homework 2 out

Week 3: February 3, 5, 6/7

- FYI: NOTE: Last day to drop a course through your Student Center is MONDAY, February 3.
- Topics: CLIENT-TIER: start intro to HTML forms
- Homework 2 due 11:59 pm Friday, February 7
- Homework 3 out

Week 4: February 10, 12, 13/14

- Topics: DATA-TIER: start intro to PL/SQL: PL/SQL basics, stored procedures, stored functions, and triggers
- Homework 3 due 11:59 pm Friday, February 14
- Homework 4 out

Week 5: February 17, 19, 20/21

- Topics: DATA-TIER: PL/SQL intro continued; PL/SQL exception handling
- Homework 4 due 11:59 pm Friday, February 21
- Homework 5 out

Week 6: February 24, 26, 27/28

- Topics: CLIENT-TIER: start intro to CSS
- Wednesday, February 26 REVIEW for Exam 1 (NOTE that this will include several review clicker questions)
- Thursday/Friday, February 27/28: there WILL be a lab exercise
- Homework 5 due 11:59 pm Friday, February 28

Week 7: March 3, 5, 6/7

- Topics: CLIENT-TIER: continue intro to CSS; intro to CSS Box Model
- Wednesday, March 5: Exam 1
- Thursday/Friday, March 6/7: there WILL be a lab exercise
- Homework 6 out

Week 8: March 10, 12, 13/14

- Topics: CLIENT-TIER: continue intro to CSS; intro to flexbox layout and grid layout
- Homework 6 due 11:59 pm Friday, March 14
- Homework 7 out

SPRING BREAK - March 17-21

Week 9: March 24, 26, 27/28

- Topics: APPLICATION-TIER: start intro to PHP
- Homework 7 due 11:59 pm Friday, March 28
- Homework 8 out

Week 10: April 2, 3/4

- NO lecture on Monday, March 31, because it is the Humboldt Cesar Chavez Holiday
- FYI: NOTE: Last day to withdraw from one, some, or all courses, with documented serious and compelling reason, with a grade of W and subject to the 18 semester-units withdrawal limit is Tuesday, April 1.
- Topics: APPLICATION-TIER: continue intro to PHP, including connecting it to a DBMS
- Homework 8 due 11:59 pm Friday, April 4
- Homework 9 out

Week 11: April 7, 9, 10/11

- **Topics**: APPLICATION-TIER: continuing connecting PHP to a DBMS
- Wednesday, April 9 REVIEW for Exam 2 (NOTE that this will include several review clicker questions)
- Thursday/Friday, April 10/11: there WILL be a lab exercise
- Homework 9 due 11:59 pm Friday, April 11

Week 12: April 14, 16, 17/18

- FYI: NOTE: Last day to change a registered class' grade option to CREDIT/NO CREDIT is Monday, April 14.
 - (limit of at most one optional CR/NC course permitted per term and note that courses applying to your CS or SE degree requirements must NOT be taken as credit/no credit; they must be graded with a letter grade)
- Topics: APPLICATION-TIER: intro to PHP sessions
- Wednesday, April 16: Exam 2
- Thursday/Friday, April 17/18: there WILL be a lab exercise
- Homework 10 out

Week 13: April 21, 23, 24/25

- **Topics:** APPLICATION-TIER: PHP example using sessions *and* OCI; CLIENT-TIER: intro to unobtrusive-style clientside JavaScript
- Homework 10 due 11:59 pm Friday, April 25
- Homework 11 out

Week 14: April 28, 30, May 1/2

- Topics: CLIENT-TIER: continue intro to unobtrusive-style client-side JavaScript
- Homework 11 due 11:59 pm Friday, May 2
- Homework 12 out

Week 15: May 5, 7, 8/9

- Topics: APPLICATION-TIER: intro to XML and JSON
- Wednesday, May 7 REVIEW for Final Exam (NOTE that this will include several review clicker questions)
- Thursday/Friday, May 8/9: there WILL be a lab exercise
- Homework 12 due 11:59 pm Friday, May 9

Final Exam:

MONDAY, MAY 12, 3:00 - 4:50 pm in SH 108.

• NOTE this time and date BEFORE making your end-of-semester travel plans!