

UTA

Today's Agenda

- Syllabus
- Software Engineering: What and Why

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Instructor

- Instructor: Jeff Lei, ylei@cse.uta.edu, x2341, ERB 531, Office hours: 2:00 - 3:30pm, Tue. & Thu.
- TA: Mehra N. Borazjany, mehra.nourozborazjany@mavs.uta.edu

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Communication Channel

- Everyone **MUST** subscribe to the class mailing list consoft@listserv.uta.edu.
- Use the following instructions to join the list:
 - Compose a message so that its subject line is empty, and its body contains a single line "subscribe consoft@listserv.uta.edu"
 - Send this message to listserv@listserv.uta.edu.
 - Confirm your subscription by replying the message from the listserv server

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Textbook & References

- Textbook
 - Richard H. Carver and Kuo-Chung Tai, [Modern Multithreading](#), John Wiley & Sons, 2005, ISBN: 0-471-72504-8
- References
 - Gregory R. Andrews. [Multithreaded, Parallel, and Distributed Programming](#). Addison-Wesley, 2000, ISBN: 0-201-35752-6.
 - Robin Milner. [Communication and Concurrency](#). Prentice Hall, 1989, ISBN: 0-13-115007-3

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Course Website

- The course web site is available at the following URL: <http://crystal.uta.edu/~ylei/cse6324>
- Lecture notes, assignments, announcements, and any supplementary materials will be posted on the web site.
- Visit the website at least once per week.

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Homework

- About **four** written assignments
 - exam problems are similar to homework problems
- Must be solved individually
 - Fine to discuss the assignments with others
 - **NEVER** share the solutions.
- Account for 20% of your final grade

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Grading

- The final grade will be calculated using the following percentages:
 - Homework - 20%
 - Midterm Exam - 50%
 - Project - 30%
- If you have any questions about your grades, you **MUST** notify the TA or the instructor within **two** weeks after the grades become available.
 - The grades become **final** after two weeks!

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Late Assignments

- Late assignments are acceptable before solutions are posted or explained in class, with 10% deduction for every 24 hours. Less than 24 will be rounded to 24.
- If you have an emergency that prevents you from completing the work, contact the TA or the instructor prior to the due date.

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Academic Integrity

- You must **EARN** your credits honestly and professionally.
- The reasons?
 - This is the only way for you to learn.
 - You don't want to lose your reputation to your fellow students.
 - You don't want to be a subject of disciplinary actions.
 - ...

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Tentative Topics

- Concurrent Programming
 - Java Threading Model, Binary/Counting Semaphores, Locks, General/Java Monitors, Link/Port/Mailbox, Rendezvous, Selective Wait, Coarse-grain vs fine-grain synchronization, Common Concurrent Problems
- Testing and Debugging of Concurrent Programs
 - Tracing/Replay, Race Analysis, Non-deterministic Testing, Deterministic Testing, Reachability Testing
- Introduction to CCS
 - Modeling Concurrency, The CCS language, Transitional Semantics, Equational Laws

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Questions?