

CSE 3320.003 Operating Systems Fall 2018

Instructor: Trevor Bakker, ERB 320

Email Address: trevor.bakker@uta.edu

Office Hours: MW 8:30PM - 10:00PM and by appointment.

Office Phone: I do not have an office phone. Email is the quickest way to contact me since I am not on campus every day.

Section Information: CSE3320 Section 003

Time and Place of Class Meetings: MW 5:30PM - 6:50 PM, Room: NH 109

Textbook: Modern Operating Systems Edition: 4th, Tanenbaum ISBN: 9780133591620

Course Website: <http://crystal.uta.edu/~bakker/CSE3320/index.html> (note the ~)

Description of Course Content: Functions and components of an operating system, including process synchronization, job scheduling, memory management, file systems protection, and deadlocks. Related system software, such as loaders, linkers, assemblers, and windowing systems. Prerequisite: CSE 2312; and IE 3301 or MATH 3313 (or concurrently).

Student Learning Outcomes: Students will be able to explain, describe and identify key concepts, fundamental algorithms, and major structures in computer operating systems. Students will be able to evaluate and synthesize applied computer operating system theory.

Descriptions of major assignments: There will be two exams plus a final exam. There will also be 3 quizzes, and approximately 4 programming assignments / homework. Programming assignments, and any homework assignments are not considered major works. All dates will be posted in advance on the course Blackboard site. The final exam date is set by the university and is non-negotiable.

Important Dates:

Drop Deadline November 2nd
Exam 1 September 26th (tentative)
Exam 2 October 31st (tentative)
Final December 7th, 5:30-8:00p.m. (fixed)

Grading Policy: Grades are based on the following: No make-up exams will be given.

Programming Assignments and Homework	40%
Quizzes	10%
Exam 1	15%
Exam 2	15%
Final Exam	20%

If the grade received on your final exam is greater than one of the earlier exams, then I will replace the lowest of the earlier two exam grades with the grade received on the final exam. In the event of a tie for lowest exam grade among the first two exams, only one will be replaced. A grade of zero on an exam, homework, or programming assignment due to cheating will not be replaced. No extra credit work will be given.

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see “Student Support Services,” below.

If a student believes an error has been made in the grading of an assignment, the student has **one week** after an assignment is returned to resubmit an assignment for re-grading if they believe there is an error. All requests for re-grading must be submitted in writing. In case of re-grading, the instructor reserves the right to re-grade the whole assignment or exam which may result in a lower grade. Requests of re-grading the final exam must be done within **one day** of receipt of that grade. Final letter grades are based on the standard ranges of:

A	90...100%
B	80...89%
C	70...79%
D	60...69%
F	0...59%

Late Submission Policy: All assignments are due at 5:30 PM on the date specified in the assignment. Submissions later than 5:30 PM will be considered late and get 0 credit. The submission time will be the time shown on the UTA Blackboard submission system.

Exceptions will only be made for documented emergencies, in strict adherence to UTA policy. Computer/network crashes or account problems such as forgotten passwords are not an acceptable excuse for late submissions. To avoid problems with crashes and last-minute problems, students are encouraged to use a personal SCM such as git, subversion, github and submit early and often. You can always revise your submission until the deadline.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 10 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, etc.

Attendance Policy: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating student's academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I do not require attendance. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients begin attendance in a course. UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients. I do strongly encourage you to attend all classes.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes

through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide reasonable accommodations to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a **letter certified** by the Office for Students with Disabilities (OSD). Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.

Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX: The University of Texas at Arlington (University) is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form

of sex discrimination and will not be tolerated. For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Michelle Willbanks, Title IX Coordinator at (817) 272-4585 or titleix@uta.edu

Electronic Communication Policy: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources, I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

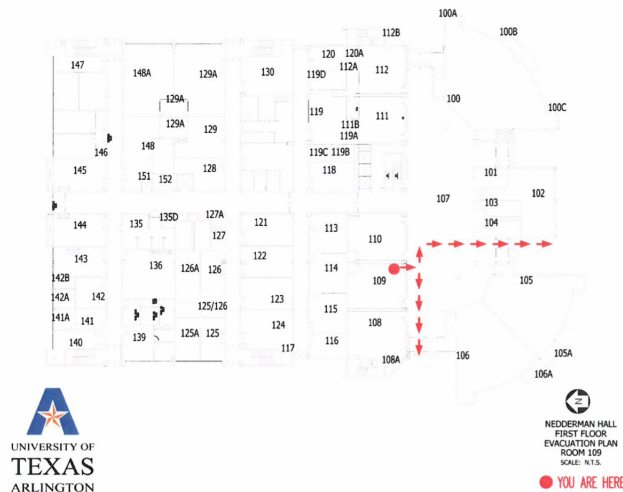
UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. After reading the syllabus to completion please email me a picture of a dinosaur. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Homework assignments, including programming assignments, unless specified, are not group projects; each student is expected to write his or her own programs individually. Code copied from the internet shall be considered a violation of this policy. All acts of academic dishonesty, including programming assignments, will be reported to the Office of Student Conduct. Cheating on the final exam will result in failure of the course. By enrolling in this course, you understand that the consequences for committing any acts of academic dishonesty will include a failing grade for the assignment, and may include failure in the class as a whole, academic sanction, and/or even dismissal from the university.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each students feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlingtons effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.



Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. Though programming assignments do not constitute major assignments, as a courtesy notice, the final programming assignment will be due April 30th, during final review week. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Course Schedule: A tentative course schedule can be found on the course website and below. Keep in mind that the dates will likely change as the semester progresses and the instructor reserves the right to modify course policies, the course calendar and assignment due dates.

Fall 2018 Schedule

Date	Chapter	Topic		Assignments
Wed, Aug 22, 2018	Chapter 1	Intro		
Mon, Aug 27, 2018	Chapter 1 and 2	OS Types and Processes		
Wed, Aug 29, 2018	Chapter 2	Processes and Threads		
Mon, Sep 3, 2018	Holiday			
Wed, Sep 5, 2018	Chapter 2	Processes and Threads		Program 1 Assigned
Mon, Sep 10, 2018	Chapter 2	Processes and Threads	Quiz 1	
Wed, Sep 12, 2018	Chapter 6	Deadlocks		
Mon, Sep 17, 2018	Chapter 6	Deadlocks		
Wed, Sep 19, 2018	Chapter 3	Memory Management		
Mon, Sep 24, 2018	Chapter 3	Memory Management		Program 1 Due / Program 2 Assigned
Wed, Sep 26, 2018			Exam 1	
Mon, Oct 1, 2018	Chapter 3	Memory Management		
Wed, Oct 3, 2018	Chapter 3	Memory Management		
Mon, Oct 8, 2018	Chapter 4	File Systems		
Wed, Oct 10, 2018	Chapter 4	File Systems		Program 2 Due / Program 3 Assigned
Mon, Oct 15, 2018	Chapter 4	File Systems	Quiz 2	
Wed, Oct 17, 2018	Chapter 4	File Systems		
Mon, Oct 22, 2018	Chapter 5	I/O		
Wed, Oct 24, 2018	Chapter 5	I/O		
Mon, Oct 29, 2018	Chapter 5	I/O		Program 3 Due / Program 4 Assigned
Wed, Oct 31, 2018			Exam 2	
Mon, Nov 5, 2018	Chapter 7	Virtualization		
Wed, Nov 7, 2018	Chapter 7	Virtualization		
Mon, Nov 12, 2018	Chapter 8	Distributed System		
Wed, Nov 14, 2018	Chapter 9	Exploits and Security		Program 4 Due
Mon, Nov 19, 2018	Chapter 9	Exploits and Security	Quiz 3	
Mon, Nov 26, 2018	Interviews and Resumes			
Wed, Nov 28, 2018	Review			
Mon, Dec 3, 2018	Review			
Fri, Dec 7, 2018	Final (5:30pm-8:00pm)			