

Department of Information Technology and Decision Sciences
College of Business
University of North Texas

Fall 2025

BCIS 4770 SYLLABUS

Course Number	BCIS 4770 Section 001			
Course Title	Operating Systems Security Principles for Business			
Course Info	Credit Hours	Days	Time	Location
	3	Wed.	2:00 - 4:50 PM	BLB 285
Instructor	Yu "Andy" Wu, Ph.D., CISA, Security+, MCSE, CNA			
Office Hours	Wed. 10:00 – 11:30 AM & 12:30 – 2:00 PM	Office	BLB 358J	
Phone	(940) 565-3735			

Academic Calendar

Classes begin	August 18
Drop with a grade of W starts	August 30
Last day to drop a course	November 7
Thanksgiving break	November 24-30
Final examination period	December 6-12

The detailed academic calendar is available at <https://registrar.unt.edu/registration/fall-academic-calendar.html>. The dates are provided here as a courtesy and the instructor is not responsible for errors and omissions.

TEXTBOOKS

Required: Robert Shimonski & Michael G. Solomon, [*Security Strategies in Windows Platforms and Applications*](#), Fourth Edition, Jones & Bartlett, ISBN: 9781284281958.

Required: CloudMatrix s.r.o., [*Linux File Management and Permissions*](#) (Linux Beginners Series Vol. 2), ISBN: 9798344536910.

OTHER COURSE MATERIALS

Supplemental readings: In addition to the required chapters (see schedule) in the textbooks, I may add supplemental readings (*including PowerPoint slides*) for some class sessions. Please check the course website frequently and acquire the materials (downloading them either directly from the site or from the provided URL) and read them *before* you come to the class. Some contents from the readings will be covered in the exams.

PowerPoint slides: They are designed to help you understand the course content during and after my lectures; however, studying solely with the slides is not sufficient.

Software: Some open source or trial version software may be required for doing some

assignments. Refer to the course Web site for instructions on how to obtain them.

COURSE PREREQUISITES

BCIS 3630 (may be taken concurrently). 2.7 UNT GPA (2.7 transfer GPA); a grade of C or better in each previously taken BCIS course; or consent of department. PBUS/BUND students may not enroll in this course unless they are assigned to BFND subplan.

COURSE DESCRIPTION

This course provides students with knowledge and skills to secure operating systems to mitigate information security breaches. It addresses basic concepts of Windows and Linux operating systems components as they relate to information security and includes various concepts and tools at the disposal of security administrators to secure workstations and servers.

COURSE OBJECTIVES

Upon completion of this course, the students will be able to:

- Describe the main principles in security design in Windows and Linux operating systems.
- Apply access control concepts and mechanisms, e.g., user and group accounts, group policies, etc., to control access to systems and resources.
- Configure and manage user and group privileges and permissions on file systems.
- Execute commands in the command console/shell of operating systems.
- Perform preliminary analysis in response to a security incident.
- Harden operating systems to strength security protection.

ASSESSMENTS

▪ **Exams**

There will be three exams during the semester. All exams are **closed book, closed notes, and to be taken independently**. The second and third exams are not comprehensive. However, bear in mind that concepts covered by earlier exams are the foundation for later topics and thus questions in later exams may implicitly test your understanding of those foundational concepts.

Unless otherwise instructed, you will take the exams at the Testing Center (Sage Hall 330) or on laptop computers provided by the Center. It is your responsibility to make arrangements to attend exam sessions. Verifiable emergencies brought to my attention *before* the exam are the only exceptions to this policy. **No make-up exams will be given.**

▪ **Enhanced Comprehension Hands-On (ECHO) Labs**

Mental engagement and hands-on exercises are important for students' success in this course. During some classes, we will have instructor-led, hands-on lab exercises, in which students follow along in real time and complete the labs. ECHO lab instructions are brief and may be in the form of oral instructions from the instructor. ECHO materials are designed to illustrate relevant knowledge and skills covered in the lectures, aiming to enhance students' comprehension of the materials.

Some ECHOs may be unlike the HOICs in BCIS 4630 or JCEs in BCIS 3680 in that the lab instructions are given only during the class. **Students shall arrange for time and computer availability so that they can carry out the ECHOs during designated class time.**

Each ECHO is worth 10 points. Four ECHOs are mandatory but additional ECHOs may be assigned. If you choose to submit the additional ECHOs, the points you earned

above the 40 mandatory points automatically become extra credit.

- **Homework Labs**

Self-paced labs will be assigned. These labs contain detailed, step-by-step instructions. All self-paced labs are mandatory and must be done **independently**.

- **Points system**

Each exams, quiz, and project carries maximum points that you may earn, subject to reallocation:

Assessment	Max. Points*
Exam 1	60
Exam 2	60
Exam 3	60
ECHO Labs	40
Homework Labs	100
Attendance	30
Semester Total Points (STP)	350

* Point allocation
subject to change

GRADING POLICY

- **Determination of Course Letter Grade**

Letter grades will be assigned as follows where the cutoff is the lowest number of cumulative points that will be assigned that grade. The cutoff points are strictly adhered to. **DON'T ROUND "BORDERLINE" POINTS TO "BUMP YOU UP" TO THE NEXT HIGHER LETTER GRADE!** No "extra work" can make up for your grades at the end of the semester.

Grade	Cut-Off
A	315 (350*90%)
B	280 (350*80%)
C	245 (300*70%)
D	210 (300*60%)
F	Below 210

- **Extra Credit**

It is my view that any extra credit you earn should be used to your full advantage in that extra credit points should not increase the STP (300 points). Otherwise, the effect of extra credit would be diluted and less straightforward to interpret in percentage terms (as both the numerator and denominator are increased). Unfortunately, the rigid setup of Canvas gradebook inflates the STP and complicates percentage calculation when extra credit points are added. Even worse, the instructor cannot turn off the display of those figures, to the confusion of students.

Therefore, **simply ignore any percentage calculation automatically done by Canvas gradebook**. Just focus on the total points you have earned to date. If you prefer to view your performance in percentage terms, just remember, **the denominator (STP) always stays at 300 points regardless of how many extra credit points I make available**. Add extra credit points to the numerator only; with the denominator held constant, the extra

credit increases your percentage to its fullest extent.

- **Grading Dispute**

Any dispute over grades must be made *in writing and within one week* of the day the exam/assignment was returned to you. Your written appeal must include the original, graded assignment, and reasons for disputing the grade. Also, note that I may choose to re-grade the assignment in its entirety, which could result in a raising or *lowering* of the grade. It is far more productive studying before exams than haggling for the points afterwards. However, if you do not understand why an answer is incorrect and want to know how to improve for future exams or assignments, I am happy to discuss them with you.

THE “INCOMPLETE” GRADE

The I (Incomplete) grade is reserved for a very limited number of true emergencies. In addition to legitimate reasons with proper documentation, a student **must be passing the course** (making satisfactory progress) when the emergency occurs. For the UNT policy regarding the I grade, see <http://essc.unt.edu/registrar/academic-record-incomplete.html>. It is also the student's responsibility to fill out the application form (http://www.coe.unt.edu/sites/default/files/796/Incomplete_grade_Form_0.doc) and obtain approval from the instructor and the department chair.

ASSIGNMENT POLICIES

Students should start to work on the assignments as soon as they are released on Canvas so that there will be sufficient time for problem resolution should technical or procedure issues occur. Feel free to contact me any time and I will make my best effort to respond to calls for help. **However, if a request for help with an assignment is sent to me on the same day the assignment is due, there is no guarantee that I will be able to respond in time to resolve the issues, although I will still try my best.** In that case, the student will be responsible for an assignment that cannot be completed to their satisfaction or expectation. The inability for the instructor to respond in time in such a circumstance should not become the reason for the student to request a time extension or grade adjustment.

All assignments must be submitted through Canvas. Email submissions to me or the grader usually are not accepted and will not be graded. If the submission fails due to Canvas or other technical difficulties, document the issue as detailed as you can and contact me immediately. If late email submission is allowed, it must be submitted to the email address in the submission instructions or it will not be graded.

MAKE-UP POLICY

Exams must be taken in class at the scheduled time. It is your responsibility to make arrangements to attend exam sessions. Religious reasons and verifiable medical or other emergencies brought to my attention *before* the exam are the only exceptions to this policy. See “Assessments” section for more details.

COURSE COMMUNICATIONS

When emailing me, please address it to **Dr.Wu.UNT2@Gmail.com**. **Do not use the message or discussion board function of Canvas.** In your email, put the course number at the beginning of the subject line, followed by a dash, and then a brief description of the subject matter in a few words, e.g., “BCIS 4910 – My Dog Hacked My Computer”. Emails sent to my regular COBA email address could get lost in the various emails I receive daily and IT'S VERY LIKELY I WON'T REPLY TO THEM.

Asking for help with your assignments. Feel free to email me directly for help with your assignments. When you do so, please remember to: (1) send email to the correct address (see above); (2) **give a detailed description and attach screenshot(s) of the issues you're having** (and don't take screenshots with your cell phone; use tools like Windows Snip-It instead); and (3) Don't wait until the last minute to seek help. If you contact me within the 24 hours before the assignment is due, there is no guarantee that you will receive timely help, since I may not be able to adjust my schedule quick enough to go over your code.

RESPONSIBILITIES OF STUDENT

- You are expected to attend class regularly. If you must miss a class, it is *your* responsibility to cover any missed material with one of your classmates.
- All work completed outside of class must be typed (word processed) and use proper screen captures or non-hand drawn diagrams.
- The professionalism of your work will count towards your grade. This includes spelling and grammar.
- Submit assignments before the due time.
- Hardware failure or inaccessibility is not a valid excuse for late work. This means that if the computer eats your assignment, or if the labs are full, you will not be excused from handing in an assignment on time.
- Missed exams receive a grade of zero.
- You must inform me of any special circumstances that might prevent you from completing course requirements on time.

PROFESSIONALISM

The Ryan College of Business is a professional school and one purpose of the college is to educate future managers and corporate leaders on the types of professional behavior that is expected in corporate settings. Therefore, students will be expected to conduct themselves in a highly professional manner at all times. Specifically, students should:

- Be on time for class.
- Read and review the assignments prior to the class.
- Be willing to contribute to class discussions and exercises.
- Be respectful toward faculty, guest speakers, and fellow students.
- Display tolerance toward varying viewpoints and differences in values.

Violations of professionalism and any disruptiveness will result in the reduction of attendance grade. The professor will determine such violations, but will give you one warning prior to reducing your grade for unprofessional behavior.

ACCEPTABLE STUDENT BEHAVIOR

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr.

ACADEMIC INTEGRITY

This course adheres to the UNT policy on academic integrity. The policy can be found at <https://policy.unt.edu/policy/06-003>. If code plagiarism is detected, both the student(s) who provide the source of the copied work and the student(s) who copied the work will receive zero points for the grading item involved.

DISABILITY & ACCOMMODATION

Any student in this class who has a documented visual or physical impairment, hearing disability, or any other disability covered by the university's services for students with disabilities should contact me during the first week of class to discuss and arrange any instructional accommodations that may be necessary. Students who would like to serve as volunteer tutors, readers or note takers for students needing special assistance are encouraged to contact me during the first week of class.

Students with ODA accommodations for extra exam time and/or quiet test-taking environment must make a reservation with the ODA office to take exams and quizzes at the ODA test center. The Sage testing center does not have the resources for these accommodations. If you decide to take your exams and quizzes with the rest of the class at the Sage testing center, you are forfeiting your extra exam time and/or test-taking environment accommodations.

TENTATIVE COURSE SCHEDULE

Date	Topic(s)	Reading	Assigned	Due
8/20	Course Overview			
8/27	OS Security Overview	S&S 1, 2		* Read S&S 5 if you didn't
		S&S 5*		take BCIS 4630 or 4740
9/3	OS Security Overview (cont'd)	S&S 2		
9/10	Windows Security Adm.	S&S 10		
9/17	Access Control	S&S 3		
	Lab Orientation			
9/24	Group Policies	S&S 6		
	Exam 1 (Sage 330 3:30 PM)			
10/1	Linux and Its Filesystem	CMS 1, 2, 3	Lab 1	
10/8	Linux Filesystem	CMS 1, 2, 3		ECHO-Lnx1, 2 due on 10/8
	ECHO-Lnx1, Lnx2			Lab 1 due on 10/11
10/15	Linux Permissions	CMS 4, 5		ECHO-Lnx3 due on 10/15
	ECHO-Lnx3			
10/22	Vulnerability Management	S&S 7	Lab 2	
10/29	OS Integrity	S&S 5, 9		Lab 2 due on 11/1
	Exam 2 (Sage 330 3:30 PM)			
11/5	System Administration	CMS 6, 7	Lab 3	ECHO-Lnx4 due on 11/5
	ECHO-Lnx4			

11/12	System Administration	CMS 13, 14		Lab 3 due on 11/15
11/19	Backup & Incident Response	S&S 8, 13		
11/26	<u>Thanksgiving, No class</u>			
12/3	OS Hardening	S&S 11		
12/10	Exam 3 (BLB 285 2:00 PM)			

NOTES ON THE SCHEDULE

- S&S: The Shimonski and Solomon textbook.
- CMS: The CloudMatrix s.r.o. textbook.
- This is a very tentative schedule and may be modified at the discretion of the instructor at any time. Students will be notified via email and/or Canvas announcements. Updated syllabus will be posted on Canvas promptly. Make sure you check syllabus/schedule updates regularly.