

DSCI 3870/Management Science Section 002

Instructor Contact

Name: Javier Rubio-Herrero, Ph.D.

Office Location: 357 E - BLB

Phone Number: (940) 565 - 3117

Office Hours: Tuesday 10:45 am – 11:45 am, and Thursday 2:30 pm – 4:30 pm, to be held via [Zoom](#).

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Communication Expectations: The instructor will communicate with students via, in-class announcements, e-mails, Canvas, and office hours. The students will communicate with the instructor via e-mails and office hours.

It is the instructor's aim to answer e-mails within 48 hours of their receipt during business days. Please, be courteous and professional when communicating with your instructor and follow the provided [Online Communication Tips](#). The instructor may not answer e-mails that do not abide to these tips.

Please, do not hesitate to contact me if you need to discuss anything.

Tutor/Grader Contact

Name: Liana Arnobit

E-mail: TBD

Tutoring Hours: ITDS Lab Schedules (both BCIS and DSCI) are usually posted during the second week of classes. Check the [Lab Schedule](#) for more information. Your tutoring meetings will happen via [Zoom](#) (meeting ID: 922-325-916). The phone-scannable card with QR code below will also help you to log into your tutoring sessions:



Communication Expectations: For tutoring and/or grading questions the tutor/grader should be your first point of contact. If you have additional questions, or need additional support for your class needs, you are most welcome to communicate with your instructor.

Course Description

Introduction to operations research for business decision making. Spreadsheet methods are used to evaluate the following: deterministic models; allocation problems, linear programming, sequencing and scheduling, and network models.

Course Structure

This course will be delivered in remote format and will take place between the weeks of August 24th, 2020 and December 7th, 2020.

Week	Topics/Cases	Practice Problems
Week 1	Course Introduction	Chapter 1 STE ¹ – 8, 12
Week 2	An Introduction to Linear Programming <i>Deadline for forming groups for projects</i>	Chapter 2 STE – 1, 2, 6, 13, 24
Week 3	An Introduction to Linear Programming (continued) <i>Case Problem</i>	Chapter 2 STE – 34, 42, 43
Week 4	<i>Review for Exam 1</i> <i>Midterm 1 to take place on Thursday, September 17th</i> <i>Deadline for selecting a topic for the group project</i>	
Week 5	Linear Programming <i>Sensitivity Analysis and Interpretation of Solutions</i>	Chapter 3 STE – 6, 10
Week 6	Linear Programming <i>Sensitivity Analysis and Interpretation of Solutions</i>	Chapter 3 STE – 12, 13
Week 7	Linear Programming <i>Sensitivity Analysis and Interpretation of Solutions</i> <i>Case Problem: Product Mix</i> Linear Programming Applications in Marketing, Finance and Operations Management	Chapter 3 STE – 12, 1 Chapter 4
Week 8	Linear Programming Applications in Marketing, Finance and Operations Management (continued)	Chapter 4 STE – 1, 15
Week 9	Linear Programming Applications in Marketing, Finance and Operations Management <i>Case Problem: Textile Mill Scheduling</i> <i>Exam 2 to take place on Thursday, October 22th</i>	Chapter 4 STE – 19
Week 10	Distribution and Network Models <i>Soft deadline for developing your projects' models</i>	Chapter 6 STE – 1, 2, 6
Week 11	Distribution and Network Models (Continued)	Chapter 6 STE – 11, 17, 23, 29
Week 12	Integer Linear Programming	Chapter 7
Week 13	Integer Linear Programming (continued)	Chapter 7 STE – 2, 5, 7
Week 14	No class <i>Prepare for your group project</i>	
Week 15	Project Presentation <i>Final Exam date: TBD</i>	

¹ Self-test Exercise. These exercises are numbered according to the 15th version of the textbook.

Some or all of the Case Problems may be solved in class. STE's will not be collected nor graded. However, it is imperative for students to solve these problems and also go through any assigned readings in order to be better prepared for the exams.

A list of important dates for this semester can also be consulted at the [Fall 2020 Registration Guide](#).

Course Prerequisites or Other Restrictions

ECON 1100, ECON 1110, MATH 1100. DSCI 2710 or consent of instructor; ACCT 2010 and ACCT 2020 with grades of C or better; MATH 1190 or equivalent.

It is assumed that students taking this course have completed the college algebra course and also have a good foundation in calculus, basic statistics and probability theory as covered in the basic statistics course. Although some review of elementary concepts and terminology is provided in the textbook, it is not intended to replace a complete course, but rather to refresh your memory. While a high degree of mathematical skills are not necessary in an "applied" course such as this, there are certain insights into the course that are gained through the mathematics involved.

Course Objectives

To provide the student with a working knowledge of management science/operations research techniques for use in business. This will be achieved by using a real-world problem oriented approach, and using examples that emphasize the multi-disciplinary nature of business problems. Spreadsheets will be used to strengthen students' ability to make business decisions. The course uses case studies and assignments that require communication and interaction, to strengthen students' understanding. Techniques covered will include linear, integer, and non-linear programming, network optimization and implementation issues. This course may seem challenging, but it will provide you with "current" and "marketable" skills in the field of Quantitative Analysis/Business Analytics.

By the end of this course, students will be able to:

1. Interpret a mathematical optimization model as a representation of actual business processes.
2. Classify optimization problems depending on their level of difficulty.
3. Formulate their own optimization models.
4. Develop solutions to those models.
5. Apply their solutions to areas such as finance, marketing, and operations management.

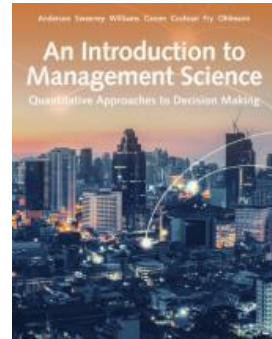
Materials

Anderson, Sweeney, Williams, Camm, Cochran, Fry and Ohlmann, *An Introduction to Management Science: Quantitative Approaches to Decision Making*, 15th Edition*, © 2018, Cengage Learning ISBN-10: 133740652X, ISBN-13: 9781337406529.

You can also purchase or rent the [digital version of the textbook](#).

The 13th or 14th edition of this text book are also acceptable.

If you intend to enroll in DSCI 4510 you will also use this book, so do not sell it!



Teaching Philosophy

Since this course will be taught remotely, we will aim at resembling a face-to-face class environment as much as possible. To make the class more dynamic, I will opt for combining slides and hand-written notes. I will write notes on-the-go in class as I explain concepts and exercises. This course has a clear mathematical background and mathematics require work and patience to be understood. I believe that this understanding cannot be attained without writing things down by yourselves and, for this reason, I expect you to be active in taking notes and in solving exercises on paper. Just by looking at slides, you might deceptively think that you understand something. However, you will also need to create models and manipulate mathematical concepts and this can only be achieved if you work on problems and concepts on paper.

Technical Requirements & Skills

Minimum Technology Requirements

- Computer with Webcam
- Reliable internet access
- Speakers
- Microphone
- Plug-ins
- Microsoft Office Suite
- [Canvas Technical Requirements](https://clear.unt.edu/supported-technologies/canvas/requirements) (<https://clear.unt.edu/supported-technologies/canvas/requirements>)
- Business or scientific calculator. It must be able to perform at least the following functions: square, square root, raise to nth power, extract nth root, logarithm. The lack of a calculator does not excuse the student from making math errors on exams. **Only these calculators will be allowed in quizzes and exams. Calculators from phones, tablets or other electronic devices will not be allowed.**

Computer Skills & Digital Literacy

- Using Canvas and supported embedded apps such as LockDown Browser and Respondus Monitor.
- Using email with attachments
- Downloading and installing software
- Using spreadsheet programs

- Using presentation and graphics programs

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors online. Here are some general guidelines:

- Treat your instructor and classmates with respect in email or any other communication.
- Always use your professors' proper title: Dr. or Prof., or if in doubt use Mr. or Ms.
- Unless specifically invited, don't refer to your instructor by first name.
- Use clear and concise language.
- Remember that all college level communication should have correct spelling and grammar (this includes discussion boards).
- Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you."
- Use standard fonts such as Ariel, Calibri or Times new Roman and use a size 10 or 12 point font
- Avoid using the caps lock feature AS IT CAN BE INTERPRETTED AS YELLING.
- Limit and possibly avoid the use of emoticons like :) or ☺.
- Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post and your message might be taken seriously or sound offensive.
- Be careful with personal information (both yours and other's).
- Do not send confidential information via e-mail

See these [Engagement Guidelines](https://clear.unt.edu/online-communication-tips) (https://clear.unt.edu/online-communication-tips) for more information.

Getting Help

Technical Assistance

Part of working fully or partially in an online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: [UIT Student Help Desk site](http://www.unt.edu/helpdesk/index.htm) (http://www.unt.edu/helpdesk/index.htm)

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 130

Walk-In Availability: 8am-9pm

Telephone Availability:

- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support, visit [Canvas Technical Help](https://community.canvaslms.com/docs/DOC-10554-4212710328) (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Student Support Services

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- [Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [UNT Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)
- [UNT Psychiatric Services](https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry) (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- [Individual Counseling](https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling) (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Other student support services offered by UNT include

- [Registrar](https://registrar.unt.edu/registration) (https://registrar.unt.edu/registration)
- [Financial Aid](https://financialaid.unt.edu/) (https://financialaid.unt.edu/)
- [Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (https://studentaffairs.unt.edu/student-legal-services)
- [Career Center](https://studentaffairs.unt.edu/career-center) (https://studentaffairs.unt.edu/career-center)
- [Multicultural Center](https://edo.unt.edu/multicultural-center) (https://edo.unt.edu/multicultural-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [Pride Alliance](https://edo.unt.edu/pridealliance) (https://edo.unt.edu/pridealliance)
- [UNT Food Pantry](https://deanofstudents.unt.edu/resources/food-pantry) (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

- [Academic Resource Center](https://clear.unt.edu/canvas/student-resources) (https://clear.unt.edu/canvas/student-resources)
- [Academic Success Center](https://success.unt.edu/asc) (https://success.unt.edu/asc)
- [UNT Libraries](https://library.unt.edu/) (https://library.unt.edu/)
- [Writing Lab](http://writingcenter.unt.edu/) (http://writingcenter.unt.edu/)
- [MathLab](https://math.unt.edu/mathlab) (https://math.unt.edu/mathlab)

Computer Labs

The BLB computer labs on the first floor will open with reduced hours and reduced seating to comply with social distancing guidelines. There will not be BLB laptop checkouts due to potential contamination issues. The library [has computers to check out for up to 24 hours](#) and the [RCOB virtual computer labs](#) will be open for business continuously.

Course Requirements

During this course you will have the following graded and not graded requirements:

- **Self-test problems:** some are already assigned in the Tentative Course Agenda above. Some others may be assigned later on during the course. Students are responsible for solving these problems in a timely manner. Self-test problems will not be collected nor graded. However, if

needed, the course tutor and I will provide feedback and help to solve them during office hours. You should expect some of these problems to be challenging.

- **Homework assignments:** these assignments will be graded and can be completed in groups of up to four people. When working in groups, only one submission with the name of the team members will be needed.
- **Real business cases and handouts:** I might provide you with magazine articles, journal papers, newspapers clippings, etc. In some cases, you will have to complete a graded in-class quiz about these materials.
- **Exams:** there will be 2 midterm exams and a final exam. They will be held online *via LockDown Browser with Respondus Monitor*.
- **Group Project:** you will have to complete a graded group project. Groups will have a maximum of 6 people. More information about this can be found in the [Group Project](#) section of this syllabus.

Your final grade will be calculated according to the following breakdown:

Course Requirement	Percentage of Final Grade
Homework assignments	10%
In-class quizzes	10%
Midterm 1	10%
Midterm 2	15%
Final exam	25%
Group project	15%
Group evaluation	5%
Exam bonus ²	10%
Total	100%

Group Project

As soon as you choose your project topic, clear it with me to avoid duplication. Sometimes your first choice topic may not work out, so be sure to allow sufficient time to find an alternative. Scheduling to meet your group members near the middle of the semester is best, but other schedules will work too. If you plan to take pictures for project, be sure to get permission if needed. Turn in both a printed paper copy and an electronic copy of your final report.

The goal of this project is to observe and understand an actual process and relate it to this course. Think about the key strategic issues and decisions that a DFW-based company (or community, system, project, etc.) faces and relate them to the analytical methods that we study in this course. That is, discuss which of our methods and concepts they are now using, or could potentially use, for their marketing, operations, finance, human resource, or accounting policies and decisions. Think of yourself as a management consultant rather than a reporter, when doing this project.

Working in groups of six, this project begins with defining a relevant topic for your project. Towards the end of the semester, each group will give a 10 to 15 minutes presentation to the class on their group project. This talk could describe a company's products (or services) and the manufacturing process and

² You will receive an extra 10% from the highest score attained in your exams. For example, if your scores are 75 (Midterm 1), 85 (Midterm 2), and 88 (Final Exam), the portion of your grades corresponding to your exams will be $75*0.125+85*0.125+88*(0.25+0.10) = 50.8$.

how the decisions for the process are made. You present different aspect of your analytical model (the decision factors, objective function, the relationship between factors, constraints), the solution, the managerial insights and recommendations. It should include some kind of visual aids such as PowerPoint slides. Regardless of the visual aids, the presentation will need some rehearsing and good coordination among the members of your team. If possible, show samples of the company's product and/or raw materials to show to the class. The quality of the presentation, as well as the content is important. **The PowerPoint presentation file is due the day before the presentation date by 10:00 a.m.** The presentation does not need to cover all the topics in the written report and not everyone in the group needs to speak.

Here is a sample outline for the written report:

1. Background on the subject/problem (not too long), why this topic is important?
2. Model description
3. Model solution
4. Recommendations for improving the management of the process
5. Final comments.

The written report, which is due at the end of the semester, should be no more than 10 typed pages, plus all attachments. Using what we have discussed in this class, make recommendations for how the management of the process could be improved. This is an opportunity to be creative and develop insights by integrating suggestions from each member of the group. **Be sure to have everyone in your group proof read the report to improve its style.** Please note that copying text or the process diagram for your report from the website is not acceptable (**be extremely cautious with plagiarism**). This paper should contain your own thoughts and how they relate to the material in this course. Your project grade will be determined by the quality of the written report and the presentation, and by your active participation in the project as evaluated by other members of your group. Have fun and good luck!

Grading

Grades measure the performance of a student in individual courses. Students will be evaluated based on their performance and command of the course materials. A student's final grade will be determined following the scheme below:

A = 90% or higher

B = 80% or higher and less than 90%

C = 70% or higher and less than 80%

D = 60% or higher and less than 70%

F = Less than 60%

Course Evaluation

The Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. At some stage during this course, students will be given access to this evaluation. I would certainly appreciate your constructive feedback when the time comes.

Course Policies

Assignment Policy

Homework assignments will be announced via Canvas. The due date for each homework will be announced on the posting date along with extra instructions (if needed). As a rule of thumb, homework has to be completed professionally and therefore it needs to be well presented, clean, readable, and easy to follow. The instructor and the grader may reduce your grade at their discretion if these general guidelines are not correctly followed.

Any assignment that is submitted after the submission deadline will not be graded and will receive zero marks. This course requires a professional attitude so **there will not be any exceptions to this rule.** Consequently, make sure that you do not leave your submissions for the last minute. See the [Late Work](#) subsection for more details about late submissions.

Examination Policy

The following policies will pertain the midterm exams and the final exam:

- All exams will have a combination of multiple choice and problem formulation/analysis.
- You will need a desktop or a laptop to complete your exams. Calculators will also be allowed. Phones and tablets will **not** be allowed.
- Students are responsible for their materials on an exam. Loaning or sharing any materials is strictly prohibited.
- It is **strictly forbidden** that students share information during an exam. Failure to comply with this will result in disciplinary actions as described in the [Academic Integrity Policy](#) subsection of this syllabus.
- Students who fail to bring their own required materials will take the exams without them and to the best of their ability.
- Further instructions will be announced ahead of time, if needed.
- In case you lose Internet connection during an exam:
 - If you are having a short disruption, Canvas will allow you to keep on working on the exam and will reconnect automatically once your Internet service resumes.
 - If the issues persist, contact the [Student Helpdesk](#) (helpdesk@unt.edu or 940.565.2324) immediately and document the remedy ticket number.
 - If the Student Helpdesk cannot address your problems or if they advise you to contact your instructor, immediately report this disruption to both your instructor and the grader and enclose a copy of the current state of your exam. This is very important to keep a recorded time stamp of the events.
 - If the issues still persist, complete your exam offline and send it via e-mail to both your instructor and the grader. **Important:** always do this within the allotted time for the exam.
- Exams are not cumulative and therefore I encourage you to take all exams. Exam information and marks will be posted on course website. If you miss an exam, please follow the steps below:
- Missed exams will receive zero marks unless a legitimate excuse is presented, as described in the [Late Work](#) subsection of this syllabus.

- In the case that you want to review a midterm exam that you took, this request must be done to the grader/instructor within two weeks since the grades were posted. Later reviews will not be accepted.
- If you want to review a final exam, this request must be done to the grader/instructor within 10 days or before the grades are due at the Registrar's Office, whatever is shorter.

Late Work

It is **highly recommended** that you work on your submissions well in advance to avoid last-minute issues. I will **not** accept any late submissions nor agree to make-up tests or exams except in the following cases:

- Medical emergency cases, in which case a doctor's note is required.
- Family emergency cases, in which case a written verifiable proof is required.
- Any other excused absence specified in Chapter 6 of Faculty Affairs document, [Student Attendance and Authorized Absences](#).

Late submissions and make-up tests or exams must always be agreed **before the corresponding due date**. No makeup tests or exams will be offered due to poor performance in exams.

Attendance Policy

I do not enforce attendance but students are expected to attend each class session. Take into account that there might be quizzes and midterm exams during regular class hours. Visit the [University of North Texas' Attendance Policy](#) to learn more.

Students are responsible for learning the contents, meet the deadlines, and follow the directions explained in class regardless of their attendance.

Class Participation

Students are expected to actively participate in class and group activities, ask relevant questions and keep up with the material discussed in earlier class sessions.

Syllabus Change Policy

The contents of this syllabus might be changed to the instructor's discretion in order to adjust the course to the specific circumstances of each semester.

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to [UNT Policy 06.003, Student Academic Integrity](#), academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Academic dishonesty is an extremely serious issue. It will not be tolerated and will be prosecuted according to UNT Policy 06.003. You are responsible for knowing what those behaviors above (cheating, plagiarism, etc.) mean and when you might be incurring any of them.

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website](https://disability.unt.edu/) (<https://disability.unt.edu/>).

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Blackboard online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

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 Dean of Students 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. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (<https://deanofstudents.unt.edu/conduct>) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle Connect](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during

weeks 13, 14 and 15 [insert administration dates] of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT website](http://spot.unt.edu/) (<http://spot.unt.edu/>) or email spot@unt.edu.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](http://www.ecfr.gov/) (<http://www.ecfr.gov/>). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](https://policy.unt.edu/policy/07-002) (<https://policy.unt.edu/policy/07-002>).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Download the UNT System Permission, Waiver and Release Form

Transmission and Recording of Student Images in Electronically-Delivered Courses

1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.

3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.