

Industrial Design Thinking/INDS 3070/501

Instructor Information

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Course Description, Structure, and Objectives

Provides a systematic approach to innovation and creative problem-solving that can be used in many disciplines. Creativity and innovation are keys to an organization's ability to gain competitive advantage and survive in industry. Provides students with an understanding of how creativity and innovation can be facilitated and managed in a work setting using design thinking.

- INDS 3070.501 Tuesday 6:00-8:50
 - \circ $\;$ There are approximately 12 modules, delivered through UNT's learning management system.
- Frisco _ FRLD 346

INDS 3070 is a combination of lectures and studio-based projects; all conducted face-to-face. As a studiobased/skill development course, solely participating in class will not be sufficient to pass the course. Active participation in all activities is required; and the class is structured to scaffold new knowledge and skills weekly. The class leverages and integrates your other classes.

"Design Thinking," for this course, is a creative problem-solving methodology. The course relies on design heuristics and builds upon your innate creativity, and explores design as a practice, a process, a proposal, and a product (or service or system, more on that later.)

Learning Outcomes

- Collaboration
 - Contribute to a team-based environment while considering cultural, neurological, and generational populations.
- Design
 - Demonstrate competency in a design process to create low-fidelity and high-fidelity design artifacts
- Analysis
 - \circ Apply theories and practices from disparate practices and professions to gain understanding
- Communication
 - $\circ~$ Articulate your understanding of objectives verbally, graphically (2 and 3-dimensionally) and in writing

Required/Recommended Materials

There are no required textbooks.

Required materials will be provided through Canvas and Willis Library.



To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System.

How to Succeed in this Course

As your instructor, I will endeavor to reply to any question or query within 24 hours. My role in this course is to present you the opportunity to acquire foundational knowledge that can be of benefit to you in your chosen profession.

- Your responsibility is to ask questions, seek clarification, and participate in studio conversations.
- I'll make every effort to articulate the assignments and expectations clearly and will depend on you to request clarification.

My office hours are:

Tuesday 5:00-6:00 in Room 353-JJ

Please email me and we can schedule an appointment.

Connect with me through email and/or by attending office hours. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within two business days, please send a follow up email. A gentle nudge is always appreciated. Office hours offer you an opportunity to ask for clarification or find support with understanding class material. Come visit me! I encourage you to connect with me for support.

Additional office hours, in person and virtually, will be offered.

- Treat your instructor and classmates with respect in email or any other communication.
- Use clear and concise language.
- Remember that all college-level communication should have correct spelling and grammar (this includes discussion boards).
- Use standard fonts such as Arial, Calibri or Times New Roman and use a size 10- or 12-point font
- Be careful with personal information (both yours and others).
- Do not send confidential information via e-mail.
- Include your name and section number in all correspondence.

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable 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 reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the <u>Office of Disability Access</u> website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.



Supporting Your Success and Creating an Inclusive Learning Environment

I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and inclusion. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please stop by my office and let me know. We are all learning together.

To support your education, no cell phones, tablets, or laptops, are allowed, unless required for the project. All assignments are required by the due date – no exceptions.

Assessing Your Work

Grades are based on mastery of the content. As a rule, I do not grade on a "curve" because that is a comparison of your outcomes to others. I do, however, encourage you to find opportunities to learn with and through others. Explore <u>Navigate's Study Buddy</u> (https://navigate.unt.edu) tool to join study groups. Maximize your learning with our coaching staff at the Learning Center. Focus on areas where you are struggling in this course by attending scheduled study group sessions with me the week before each exam. Forward together!

INDS 3070 Grading Summary	
Syllabus Quiz	10 Points
Participation	390 Points
Projects & Individual Presentations	400 Points
Final Presentation – Team 200 Points	
	1000 Points

A = 900-1000 B = 800-899

C = 700-799

D = 600-699

F = 500-599



Course Schedule

Every effort will be made to adhere to the schedule; however, due to different learning pace, it is not uncommon for the schedule to be altered to address areas where additional time is needed to learn the material. Students will be notified by Eagle Alert if there is a campus closing that will impact a class and describe that the calendar is subject to change, citing the <u>Emergency Notifications and Procedures Policy (PDF)</u> (<u>https://policy.unt.edu/sites/default/files/06.049_Standard%20Syllabus%20Policy%20Statements_supplement.</u> pdf)

Week	Topic
Week 1 – Jan 17	1A - Course Introduction, Syllabus
Introduction	1B- Issue Student Presentations from Lidwell Book
	1C – Post it Note Exercise
Week 2 – Jan 24	2A - Modern History of Design/What is Good Design?
History	2B – Student Presentation 1
	2C – Student Presentation 2
	2D – Creative Matrix Exercise
	*Read – Dorst The Nature of Design Thinking
Week 3 – Jan 31	3A – Human Factors, Proxemics, Anthropometrics, Ergonomics,
Human Factors	3B - Special User Groups, Universal Design, Aging in Place
	3C – Student Presentation 1
	3D – Student Presentation 2
	*Read – Gray What Problem are we solving?
Week 4 – Feb 7	4A – Sustainability & Energy
Sustainability	4B – Student Presentation 1
	4C – Student Presentation 2
	4D – Looking Exercise, Walk-a Mile, Fly-on-the-wall, Contextual Inquiry
Week 5 – Feb 14	5A – Design Principles and Elements
Design Principles	5B – Student Presentation 1
	5C – Student Presentation 2
Week 6 – Feb 21	6A – Design Theories
Design theory	6B - Student Presentation 1
	6C – Student Presentation 2
Week 7 – Feb 27	7A – Color & Light
Color & Light	6B - Student Presentation 1
	6C – Student Presentation 2
Week 8 – Mar 7	8A – Technology in Design
Ideation	8B – Fabrication Lab Tour
	8C - Student Presentation 1
	8D – Student Presentation 2
	8E – Kiva Plank Exercise
Week 9 – Mar 14	Spring Break – No Classes



Week	Торіс
Week 10 – Mar 21	10A – Design Personas & Storytelling
Technology	10B - Student Presentation 1
	10C – Student Presentation 2
	10D – Persona/Storytelling Exercise
Week 11 – Mar 28	11A – Ideation & Design Concepts
Personas	11B - Student Presentation 1
	11C – Student Presentation 2
Week 12 – Apr 4	12B - Student Presentation 1
Final Project	12C – Student Presentation 2
Week 13 – April 11	13B - Student Presentation 1
Final Project	13C – Student Presentation 2
Week 14 – Apr 18	14A Final Project
Final Project	
Week 15 – Apr 25	15A Final Project
Final Project	
Week 16 – May 2	Last Regular Class Meeting
Presentation	

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.

Students are responsible for authenticating any assignments submitted to an instructor. If asked, you must be able to produce proof that the assignments you submitted are your work. Therefore, we recommend that you engage in a verifiable working process on assignments. Keep copies of all drafts of your work, make photocopies of research materials, write summaries of research materials, retain Writing Center receipts, keep logs or journals of your work on assignments and papers, and save work and drafts on a disk or cd. The inability to authenticate your work, should an instructor request it, is sufficient grounds for failing the assignment. In addition to requiring a student to authenticate his/her work, the instructor may employ various other means of ascertaining authenticity through engaging in internet searches, creating quizzes based on student work, requiring students to explain their work and process orally.

Academic Integrity Policy (PDF)

(https://policy.unt.edu/sites/default/files/06.049_Standard%20Syllabus%20Policy%20Statements_supplement.pdf).

Attendance and Participation

Research has shown that students who attend class are more likely to be successful. You should attend every class unless you have a university excused absence such as active military service, a religious holy day, or an



official university function as stated in the <u>Student Attendance and Authorized Absences Policy (PDF)</u> (https://policy.unt.edu/sites/default/files/06.039_StudAttnandAuthAbsence.Pub2_.19.pdf). If you cannot attend a class due to an emergency, or are balancing the demands of familial responsibilities, please let me know.

Communication before the absence reinforces professional behaviors.

Because this course involves collaboration, participation is essential to learning. Our project-based activities require you to be actively engaged in discussions and group work. I understand tardiness and absences may occur. If you are late to class, please drop me an email to let me know the circumstances. If you must miss class, please let me know prior to your absence.

Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community. If you are experiencing any <u>symptoms of COVID</u> (https://www.cdc.gov/coronavirus/2019-ncov/symptoms testing/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or <u>askSHWC@unt.edu</u>) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Team at <u>COVID@unt.edu</u> for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure.

UNT Policies & Procedures

UNT Helpdesk (http://www.unt.edu/helpdesk/index.htm)

Email: <u>helpdesk@unt.edu</u> Phone: 940-565-2324 In-Person: Sage Hall, Room 130 Walk-In Availability: 8 am-9 pm Telephone Availability:

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

Laptop Checkout: 8am-7pm

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

Student Support Services

- <u>Registrar</u> (https://registrar.unt.edu/registration)
- <u>Financial Aid (https://financialaid.unt.edu/)</u>
 - Financial Aid Satisfactory Academic Progress Undergraduates



- A student must maintain Satisfactory Academic Progress (SAP) to continue to receive financial aid. Students must maintain a minimum 2.5 cumulative GPA in addition to completing a required number of credit hours based on total registered hours per term. Students cannot exceed attempted credit hours above 150% of their required degree plan. If a student does not maintain the required standards, the student may lose their financial aid eligibility.
- If, at any point, you consider dropping this or any other course, please be advised that the decision to do so may have the potential to affect your current and future financial aid eligibility.
 Drop Procedures:
 - Official withdrawal from class is the responsibility of the student. If you are unable to complete the course or courses for which you have registered, it is your responsibility to withdraw formally from the course. Refer to the UNT course schedule for drop dates and procedures.
 - If you drop after the published date, you will receive a grade of "F" for the course.
 - Dropping/Withdrawing from the Course:
 - February 25, 2022 Last day for a change to pass/no pass grade option
 - April 8, 2022 Last day to drop a course or withdraw from the university with a grade of W for courses a student is not passing. After this date, a grade of WF may be recorded.
 - May 13, 2022 Last day term.
- Please visit <u>http://financialaid.unt.edu/satisfactory-academic-progress-requirements</u> for more information about financial aid, Satisfactory Academic Progress. It may be wise for you to schedule a meeting with an academic advisor at your college or visit the Student Financial Aid and Scholarships office to discuss dropping a course before doing so.
- <u>Code of Student Conduct:</u> provides Code of Student Conduct along with other useful links
- <u>Office of Disability Access</u>: exists to prevent discrimination based on disability and to help students reach a higher level of independence
- <u>Student Legal Services</u> (https://studentaffairs.unt.edu/student-legal-services)
- <u>Career Center</u> (https://studentaffairs.unt.edu/career-center)
- <u>Multicultural Center</u> (https://edo.unt.edu/multicultural-center)
- <u>Counseling and Testing Services</u> (https://studentaffairs.unt.edu/counseling-and-testing-services)
- <u>Student Affairs Care Team</u> (https://studentaffairs.unt.edu/care)
- <u>Student Health and Wellness Center</u> (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- <u>Pride Alliance</u> (https://edo.unt.edu/pridealliance)

Academic Support Services

- <u>Academic Resource Center</u> (https://clear.unt.edu/canvas/student-resources)
- <u>Academic Success Center</u> (https://success.unt.edu/asc)
- UNT Libraries (https://library.unt.edu/)
- <u>UNT Learning Center</u>: provides a variety of services, including tutoring, to enhance the student academic experience
- <u>UNT Writing Center</u>: offers free writing tutoring to all UNT students, undergraduate, and graduate, including online tutoring



- <u>Succeed at UNT:</u> information regarding how to be a successful student at UNT
- <u>Writing Lab</u> (http://writingcenter.unt.edu/)
- <u>MathLab</u> (https://math.unt.edu/mathlab)