

IND2460C - Computer Applications in 3D Design

Syllabus - Spring 2025

Updated on 1/6/2025

Credit Hours: **3**

Instructor:

Shabboo Valipoor, Ph.D., EDAC

Email: sh.valipoor@ufl.edu

Office: Antevy Hall, Room 350

Office Hours: **TH** (12:30 p.m. - 4:30 p.m.) or by appointment

Phone: 352-294-1451

Class Meeting Time:

Section 06AB: **MW**, Periods 6&7 (12:50 p.m. - 1:40 p.m. & 1:55 p.m. - 2:45 p.m.)

Section 11D4: **MW**, Periods 8&9 (3:00 p.m. - 3:50 p.m. & 4:05 p.m. - 4:55 p.m.)

Class Location:

AH 116

Course Description:

This course introduces essential graphic applications commonly used in the design process. Students will learn to model building interiors using both two-dimensional and three-dimensional techniques. The course focuses on exploring AutoCAD and Revit, two of the most widely used tools by interior designers. AutoCAD is a versatile drafting tool widely used for precise two-dimensional drawings and technical documentation, while Revit is a powerful Building Information Modeling (BIM) platform that facilitates design, documentation, and the creation of three-dimensional models with realistic perspective renderings.

Course Communications:

Class resources, announcements, updates, and assignments will be available on Canvas. The preferred method of communication for this course is email. If you have questions before the next class meeting, please send them to the instructor via Canvas message or UFL email and be sure to copy the teaching assistant. To meet with the instructor during office hours or at another time, you must schedule an appointment via email.

Reading Materials:

No textbook is required for this course. Relevant handouts, guidelines, project examples, and online references will be provided on Canvas.

Materials and Supplies Fees:

There are no materials and supplies fees required for the course during this semester.

Prerequisite Knowledge and Skills:

This course has no prerequisites. However, it builds on the knowledge gained in IND 2313: Interior Design Communication Systems.

Course Objectives:

Specific educational goals of this course are derived from the Council for Interior Design Accreditation (CIDA) Standards:

- Students are able to apply a variety of communication techniques and technologies appropriate to a range of purposes and audiences. (9e)
- Students' works demonstrate the ability to explore two- and three-dimensional approaches across a range of media types. (11b)
- Students' works demonstrate the ability to appropriately use color solutions across different modes of design communication. (12I)

Instructional Methods:

Learning in this course will primarily occur through demonstrations, presentations, in-class exercises, assignments, and projects. Three projects and a series of assignments are designed to achieve the student learning outcomes. Additionally, some topics will require students to complete in-class exercises. To successfully complete these exercises, attendance and punctuality are essential.

Course Policies

Attendance Policy:

Punctuality and **active participation** are critical for success in this course. "Attendance and Participation" are assessed based on the following:

- Arriving **on time** for class.
- Being physically **present** throughout the scheduled class time.
- Demonstrating **engagement** and focus during class activities.
- Completing graded and ungraded **in-class exercises** on time.
- **Responding** promptly to course-related emails.

IND 2460C is an interactive course that requires your full attention during class. Arriving late disrupts your classmates and the flow of the session, as catching up may require asking others for missed information. TAs are not responsible for helping late students catch up. It is your sole responsibility. Therefore, **DO NOT** be late!

Absent students are responsible for obtaining missed information and completing any assigned work. The following guidelines apply:

1. Excused Absences: **Documentation** (e.g., a doctor's note for health emergencies, a field trip letter) must be provided to excuse absences.

2. Unexcused Absences: Up to **two** unexcused absences are allowed. Each additional unexcused absence will result in a reduction of **one letter grade** from your final course grade.
3. Religious Holidays: **No documentation** is required, but you **must notify the instructor** in advance of the holiday and any related absence.
4. If you anticipate missing a class, **notify the instructor** as early as possible to discuss how to stay on track.

Assignment Policy:

Assignments must be submitted through Canvas via the assignment page, following any instructions provided therein. Due dates are specified in the course calendar. All assignments, whether complete or incomplete, must be submitted by the due date and will be graded as submitted. **Late submissions will incur a 20% penalty for each day (or partial day) past the deadline.**

Make-up Policy:

Students who can demonstrate that they were unable to submit an assignment by the deadline due to an excused absence, and who provide appropriate documentation, will be granted a reasonable extension to complete the work. Requests for make-up work due to **technical issues will not be accepted**. All students have access to the computer lab (Rooms 116 and 118). In the event of technical issues with personal computers, assignments can be completed in the lab.

Requirements for class attendance and make-up exams, assignments, and other work in the course are consistent with university policies. See [UF Academic Regulations and Policies](#) for more information regarding the University Attendance Policies.

Course Technology:

You will learn to build and develop digital models using the 2025 versions of AutoCAD and Revit, which are installed on the computers in AH 116. For your personal computer, you can download free educational licenses for these applications through Autodesk's website (autodesk.com). If you plan to use your own laptop in the lab, a **three-button mouse with a center wheel-button is required**. Trackpads alone do not support effective 3D navigation and will significantly increase the time needed to complete your work. Choose an optical mouse that is comfortable for extended use. Additionally, you are required to have an [Enscape license](#), which is billed yearly with an 86% discount available for students.

Required and recommended hardware and software for IND students are listed here:

<https://dcp.ufl.edu/interior/ind-laptop-requirements/>

For technology related issues, the UF computing help desk can be reached at:

- <http://helpdesk.ufl.edu>
- (352) 392-HELP - select option 2

UF Policies

University Policy on Accommodating Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. See the [Get Started With the DRC](#) webpage on the Disability Resource Center site. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

University Policy on Academic Conduct:

UF students are bound by The Honor Pledge which states “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the [UF Conduct Code](#) website for more information. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Campus Resources:

For technical support for this class, please contact the UF Help Desk at:

- helpdesk@ufl.edu
- (352) 392-HELP - select option 2
- <https://helpdesk.ufl.edu/>

Health and wellness resources:

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care](#) website to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit the [Counseling and Wellness Center](#) website or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the [Student Health Care Center](#) website.
- University Police Department: Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies)
- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the [UF Health Emergency Room and Trauma Center](#) website.
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.

Grading Policies

Methods by which students will be evaluated and their grade determined

The final grade will be based on your performance in the following activities:

Category	Percentage of total grade
Assignments	35%
In-class exercises	10%
Project 1	20%
Project 2	20%
Digital Board	10%
Attendance & Participation	5%

Information on current UF grading policies for assigning grade points:

This course will follow the policies on the UF Undergraduate Catalog:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Grading Scale:

For further information on UF's Grading Policy, see: <http://www.isis.ufl.edu/minusgrades.html>

Grade	%	Grade points	Grade	%	Grade points
A	93-100	4.0	C	73-76.9	2.0
A-	90-92.9	3.67	C-	70-72.9	1.67
B+	87-89.9	3.33	D+	67-69.9	1.33
B	83-86.9	3.0	D	63-66.9	1.0
B-	80-82.9	2.67	D-	60-62.9	.67
C+	77-79.9	2.33	E	0-59	0.0

Online course evaluation

Students are expected to provide professional feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

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WK	Date	Topics / Activities	Due
1	M 1/13	- Introduction to course, logistics, and expectations - Introduction to AutoCAD interface and basics	
	W 1/15	- AutoCAD 2D tools and commands - Basic drawing techniques: lines, polylines, circles, etc.	
2	M 1/20	MLK DAY - NO CLASS	
	W 1/22	- Floor plans in CAD	Assignment 1
3	M 1/27	- Floor plans cont. - Layer management and organization	Assignment 2
	W 1/29	- Furniture development and placement - Layout design lecture	
4	M 2/3	- Dimensions, printing, and scaling - Techniques for creating precise technical drawings	Assignment 3
	W 2/5	- Tracing images to create elevations and sections	Brand selection
5	M 2/10	- Introduction to Revit - Understanding BIM (Building Information Modeling) concepts and workflow	Assignment 4
	W 2/12	- Revit basics: interface, tools, and commands - Setting up a project and levels	
6	M 2/17	- Modeling building components in Revit - Creating walls, floors, and ceilings	Assignment 5
	W 2/19	- Advanced modeling techniques in Revit - Adding doors, windows, and openings	
7	M 2/24	- Applying and managing materials in Revit - Material libraries and customization	Assignment 6
	W 2/26	- Materials in Revit (continued) - Working with material parameters and schedules	
8	M 3/3	- Introduction to lighting in Revit - Adding and managing light sources	Assignment 7
	W 3/5	- Rendering basics in Revit - Setting up views for high-quality renders	
9	M 3/10	- Start of Project 1: Application of skills learned - Introduction to project objectives and requirements	
	W 3/12	- Project 1 progress review - Individual feedback on initial designs	

10	M	3/17	SPRING BREAK - NO CLASS	
	W	3/19		
11	M	3/24	- Project 1 progress review - Troubleshooting and refining designs	
	W	3/26	- Final review of Project 1 - Preparing for submission	Project 1 due 3/28
12	M	3/31	- Start of Project 2: Advanced design applications - Overview of project objectives and deliverables	
	W	4/2	- Project 2 progress review - Applying advanced techniques in Revit	
13	M	4/7	- Continued progress review of Project 2 - Focus on digital workflows and presentation quality	
	W	4/9	- Creating digital boards for presentation - Finalizing project deliverables	Project 2 due 4/11
14	M	4/14	PIN-UP Day - No class	
	W	4/16	- 3D modeling in AutoCAD - Arch	Digital Board
15	M	4/21	- 3D modeling in AutoCAD - Furniture	
	W	4/23	- Workday: Assignment support and individual feedback	Assignment 8 due 4/25

* This calendar is a general outline of the course. The instructor reserves the right to alter the course in response to academic conditions and opportunities.