

Course Description: This course introduces students to translating design thinking from technical drawing and sketching to computer drawing applications; CAD.

Purpose of Course: This course imparts drafting skills and techniques utilized to effectively communicate intent. It is designed to instill a structured and systematic professional drafting workflow in order to produce clear and consistent drafting.

Pre-Requisite Knowledge and Skills: Basic hand drafting conventions; computer use.

Objectives:

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

- Understand the principals of working in a computer based drafting program
- Collect, capture and manipulate digital content using industry-leading applications
- Understand USITT graphic arts standards used in computer drawing
- Create 2d Drawings from 3d forms and manipulate and create 3d forms to provide 2d drawing planes
- Gain experience working effectively in a forum of open discussion and exploration

Required Computer Applications:

The required applications for this course are available in the current catalog of UF APPS. All programs are offered for both PC and Mac operating systems, though demos will be done in class on the Mac versions.

- AutoCAD (PC or Mac) –Autodesk has licenses of AutoCAD (PC or Mac) through their Education Community. Go to <http://www.autodesk.com/education/free-software/all> Please download the most recent version of AutoCAD
- SketchUp Pro – Students can obtain a 1-year license to Sketchup Studio (includes Sketchup Pro through Creation Engine for \$55/ year. Go to <http://www.creationengine.com/html/sketchup.html>
- Adobe CC (Illustrator & Photoshop) – available to students for \$19.99/month or \$239.88/year or through UF Computing Help Desk for \$140/year or \$77/six months: <https://helpdesk.ufl.edu/software-services/adobe/>

Required Technology: Students are required to have access to a computer and internet. A personal laptop is highly recommended as there will be many times where the students will be allowed to work on their projects during class time in order to receive feedback and ask questions. If possible, students should bring these personal laptops with them to every class in order to follow along with the lessons.

The Technology Support Center provides computer support for Digital Worlds students who access Zoom, lecture recordings, student equipment, facilities and other technology-based resources. <http://digitalworlds.ufl.edu/support>

For computer assistance related to Zoom, lecture recordings, student equipment, and facilities request please submit a Help Ticket or email support@digitalworlds.ufl.edu

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the UF Computing Help Desk available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu

Required Texts:

Designer Drafting and Visualizing for the Entertainment World by Patricia Woodbridge

Recommended Texts:

The Backstage Handbook: An Illustrated Almanac of Technical Information by Paul Carter

Drafting for the Theatre by Dennis Dorn and Mark Shanda

Drafting Scenery for Theatre, Film and Television by Rich Rose

Traditional Details edited by John Belle, published by John Wiley & Sons

Attendance: The success of this course is based on discussion and class participation. Attendance is vital. Only one (1) unexcused absences from class will be permitted without penalty. Each additional unexcused absence will lower your final grade by 5%. Two (2) late arrivals and/or early departures to/from class will count as one (1) absence. Three unexcused absences will result in a failing grade in this class. Excused absences are consistent with university policies in the undergraduate catalog ([https:// catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/](https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)) and require appropriate documentation.

The concepts and principles are presented in a systematic and cumulative manner, with each project building on previous concepts and techniques. Therefore, attendance and punctuality are expected. If you do not have the work completed, you are expected to attend class anyway; bring to class whatever work you have done to that point. If you do miss class, it is your responsibility to make up the work missed in a timely fashion. You are responsible for all work due during the semester.

Grading & Expectations: Your grade will be strongly effected by your completeness, consistency of your drafting and level of improvement. **In general, projects will be graded on: drawing management, layer management, layout, lineweight, linetype, notation, accuracy of the orthographic/section views and the level of detail incorporated.** The final plotted drawings, PDF file and the digital AutoCAD file will all factor into the grade for each project. You are required to turn in all digital files (AutoCAD DWG and PDF) via Canvas in addition to the final plotted/bound drawings to receive full credit for each project unless otherwise noted.

You are expected to come to class prepared and ready for the day's activity. All drawings must be plotted full-scale for critique/redline days and finals. Be sure to factor in plotting time as that will not be an excused reason for being late to class.

All deadlines are final. Projects that are handed in past the due date will be reduced by one letter grade per class meeting.

Academic fraud and/or plagiarism is not acceptable and will result, at a minimum, in a zero credit for that assignment. Students are encouraged to share ideas and AutoCAD "tips" with each other but you are expected to do your own work. A basic understanding and broad utilization of theatrical construction techniques is required to be successful. Not "knowing" how to draft a particular unit is not a valid excuse for not drafting it at all, you must attempt something.

The policies outlined by the university for grading and for assigning grade points can be located at this website: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Grading Breakdown:

Class Participation and attendance (10%)

Project #1 (15%): An introductory project to ensure the student has an understanding of the tools of the program

Project #2 (15%): A project requiring the students to design and draft a single scenic item

Project #3 (25%): A project converting a completed drafting packet from hand drafting to CAD

Project #4 (35%): A project converting a digital 3D model into a complete 2D drafting packet

Various Details: The instructor will endeavor to adhere to the course schedule/project due dates but some adjustments are likely to be required. As a project based course, self-direction and time-management is extremely important. Drawings must be plotted full-scale for critique days and finals. All plots must be monochrome; no color. Complex drafting requires critical thinking and problem solving, which is often easier done by hand. It is highly recommend to utilize a sketchbook to quickly sketch out possible solutions to difficult problems/details. Use this journal to plan your projects as well. In-class workdays are meant for one-on-one questions; come prepared and ready to ask questions.

Class Demeanor: Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all. Potentially offensive subject material should at minimum be accompanied with a warning to the viewer or avoided altogether. While the instructor approves of critical thinking and controversial topics there will be no tolerance of any comment of content containing harassment; violent, threatening, defrauding or obscene material; accessing or publishing pornographic, sexual comments or images, racial slurs, gender-specific comments; any comments that could reasonably offend someone on the basis of their age, sexual orientation, religious or political beliefs, marital or parental status, physical features, national origin, or disability.

Mobile Phones: Please turn off all phones or place in silent mode while in class. The use of cell phones or other mobile devices is disruptive, and therefore is prohibited during class. Except in emergencies, those using such devices must leave the classroom for the remainder of the class.

Classroom Culture: This class is a learning community in which all are welcomed and equally valued, regardless of background or identity category. I encourage you to share your experiences (as they are relevant to the course) and to learn from others' experiences, particularly when they are different from your own. In this classroom, you have a right to your own identity. This includes being called by your preferred name, pronounced correctly, and the use of correct pronouns. You have the right to adjust those things at any point in your education. If there are aspects of the instruction of this course that result in barriers to your inclusion, please contact me privately.

Online Course Evaluations: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students <https://evaluations.ufl.edu/results/>

University Honesty Policy: 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. Click here to read the Conduct Code. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Students Requiring Accommodations: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352- 392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Online classes and in-class recording:

Occasionally this course will be held online via Zoom. Students will have the dates provided in the schedule outlined in this syllabus as well as reminded during the class meeting prior. Students will be provided

Online classes are recorded and therefore it is the students choice to display their camera or not during the recording process. Students are expected to be present on camera at the class meeting time. Once recording begins, they may opt out of showing their camera image if they so wish. Students are expected to respond to instructor or classmate comments or questions in a reasonable time, unmuting and responding indicating a focus of attention. If the student is going to be away from the session, it is important to communicate with the instructor in the chat window and express that a need to be excused momentarily is required. Students are also expected to notify on return. Failure to do so or failure to respond will be considered as an unexcused early departure .

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student

Disclaimer: This syllabus represents the instructor’s current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

COVID-19: In response to COVID-19, the following practices are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.

- If you are not vaccinated, get vaccinated. Vaccines are readily available at no cost and have been demonstrated to be safe and effective against the COVID-19 virus. Visit this link for details on where to get your shot, including options that do not require an appointment: <https://coronavirus.ufhealth.org/vaccinations/vaccine-availability/>. Students who receive the first dose of the vaccine somewhere off-campus and/or outside of Gainesville can still receive their second dose on campus.
- You are expected to wear approved face coverings at all times during class and within buildings even if you are vaccinated. Please continue to follow healthy habits, including best practices like frequent hand washing. Following these practices is our responsibility as Gators.
 - Sanitizing supplies are available in the classroom if you wish to wipe down your desks prior to sitting down and at the end of the class.
 - Hand sanitizing stations will be located in every classroom.
- If you are sick, stay home and self-quarantine. Please visit the UF Health Screen, Test & Protect website about next steps, retake the questionnaire and schedule your test for no sooner than 24 hours after your symptoms began. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 (or email covid@shcc.ufl.edu) to be evaluated for testing and to receive further instructions about returning to campus. UF Health Screen, Test & Protect offers guidance when you are sick, have been exposed to someone who has tested positive or have tested positive yourself. Visit the [UF Health Screen, Test & Protect website](#) for more information.
 - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.
 - If you are withheld from campus by the Department of Health through Screen, Test & Protect you are not permitted to use any on campus facilities. Students attempting to attend campus activities when withheld from campus will be referred to the Dean of Students Office.
- Continue to regularly visit coronavirus.UFHealth.org and coronavirus.ufl.edu for up-to-date information about COVID-19 and vaccination.

Health and Wellness Recourses:

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

Academic Resources

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources

Teaching Center: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers

Student Complaints On-Campus: Visit the [Student Honor Code and Student Conduct Code](#) webpage for more information

On-Line Students Complaints: View the [Distance Learning Student Complaint Process](#)

Course Schedule: This schedule is only a guide and is subject to change

Date	Class Topic	Focus
Aug 23	Introduction	Discuss syllabus
	Lecture	Introduction to AutoCAD- an overview of the program
Aug 25	Lecture	Getting to know the program- using tools and buttons
Aug 30	Lecture	Layers and Lineweights
	Project #1	Discuss project assignment
Sep 01	Lecture	Model space vs Paper space
Sep 06	NO CLASS	Labor Day
Sep 08	Lecture	Orthographic Projection/ USITT drafting standards
Sep 13*	ONLINE CLASS	Class will be held via Zoom
	Project #2	Discuss project assignment
Sep 15*	ONLINE CLASS	Class will be held via Zoom
	Project #1	PROJECT DUE (.dwg and .pdf submitted)
	Class discussion	Discuss Project #1
Sep 20	Project #2	Design sketches due
	Class discussion	Discuss each student's designs and plans for drafting
Sep 22	Lecture	Dimensions and Notations
Sep 27	Lecture	Utilizing Adobe Photoshop and Illustrator with AutoCAD
Sep 29	Project #2	Prelims Due (Redline session)
Oct 04	Lecture	Blocks, hatches, wipeouts, etc.
Oct 06	Project #2	PROJECT DUE (plotted, .dwg and .pdf submitted)
	Class discussion	Discuss Project #2
Oct 11	Project #3	Discuss project assignment
Oct 13	Project #3	In class work day for questions/discussion of problem areas
Oct 18	Lecture	Open to fill in requests from students
Oct 20	Lecture	Open to fill in requests from students
Oct 25	Project #3	Prelims Due (Redline session)
Oct 27	Project #3	Prelims Due (Redline session), continued
Nov 01	Project #3	In class work day for questions/discussion of problem areas
Nov 03	Project #3	PROJECT DUE (plotted, .dwg and .pdf submitted)
	*Town Hall	1:30pm- Students are permitted to leave class early to attend
	Class discussion	Discuss Project #3
Nov 08	Lecture	Utilizing Sketchup Pro with AutoCAD
	Project #4	Discuss project assignment
Nov 10	Lecture	Utilizing Sketchup Pro with AutoCAD, continued
Nov 15	Lecture	Export cleanup within AutoCAD
Nov 17	Project #4	In class work day for questions/discussion of problem areas
Nov 22	Project #4	In class work day for questions/discussion of problem areas
Nov 24	NO CLASS	Thanksgiving Break
Nov 29	Project #4	Prelims Due (Redline session)
Dec 01	Project #4	Prelims Due (Redline session), continued
Dec 06	Project #4	In class work day for questions/discussion of problem areas
	Project #4	PROJECT DUE (plotted, .dwg and .pdf submitted)
	Class discussion	Discuss Project #4

University final timeslot: Thursday, December 16: 12:30-2:30 **This course will not meet during the allotted final timeslot as there is no exam**