

<p>TERM: Spring 2023 CREDITS: 3 LEVEL: G/U CLASS TIME: TR 11:10am-12:30pm LOCATION: Drake 1112</p>	<p>INSTRUCTOR: Brad Steinmetz OFFICE: Drake 087 OFFICE EMAIL: steinmetz.25@osu.edu OFFICE PHONE: 614-688-3751 OFFICE HOURS: TR 12:30-2:00</p>
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LEARNING OBJECTIVES: Examine and apply digital drafting and modeling techniques essential to design and fabrication in the theatre and live events field. Understand and develop a facility for creating typical drawings: ground plans, sections, elevations and detail drawings. Explore and use modeling as a tool for creating and communicating dimensional and spatial design ideas.

TEACHING METHOD: lecture, demonstration, exercises, lab practice

REQUIRED SUPPLIES & TECHNOLOGY:

Architects Scale Rule	available @ bookstore, office supply stores, online
AutoCAD 2021 software	available in Drake 1112
SketchUp Pro 2021 software	available in Drake 1112

RECOMMENDED TEXTS:

<i>Drafting for the Theatre</i> by Dennis Dorn and Mark Shanda	isbn.nu/9780809330379
<i>Designer Drafting and Visualizing...</i> by Tine & Woodbridge	isbn.nu/9780240818917
<i>The Backstage Handbook</i> by George Chiang & Paul Carter	isbn.nu/9780911747393

GRADING: Projects will be judged on completeness, clarity of presentation, accuracy and appearance.

Lines & Shapes Exercise	5%	
Orthographic Exercise	5%	
Dimensioning Exercise	5%	
Technical Drawing Exercise.....	10%	
R&J Drafting Project.....	20%	
3D Orthographic Exercise	5%	
Sketchup Exercise	5%	
Furniture Model.....	5%	
Design Recreation	10%	
Final Design Model.....	15%	
Final Design Package	15%	
Total	100%	

	Grading Scale:	
	93 - 100.0	A
	90 - 92.9	A-
	87 - 89.9	B+
	83 - 86.9	B
	80 - 82.9	B-
	77 - 79.9	C+
	73 - 76.9	C
	70 - 72.9	C-
	67 - 69.9	D+
	60 - 66.9	D
	0 - 59.9	E

COURSE ASSIGNMENTS:

LINES & SHAPES EXERCISE (5%) – Replicate a provided drawing in AutoCAD. Upload DWG file.

ORTHOGRAPHIC EXERCISE (5%) – Draw orthographic shapes in AutoCAD. Upload DWG file.

DIMENSIONING EXERCISE (5%) – Draw appropriate dimensions on provided AutoCAD drawings. Create a 2-page PDF and upload.

TECHNICAL DRAWING EXERCISE (10%) – Create construction drawings in AutoCAD for given scenic units. Include both finished face and framing drawings of each with complete dimensions. Create a 1-page PDF and upload.

R&J DRAFTING PROJECT (20%) – Create complete ground plan and section drawings in AutoCAD for a given design of *Romeo and Juliet*. Create a multi-page PDF as well as an eTransmit ZIP file and upload both. (GRADUATE STUDENTS: This project will also include elevation drawings.)

3D ORTHOGRAPHIC EXERCISE (5%) – Recreate the objects from the Orthographic Exercise in 3D using AutoCAD. Upload DWG file.

SKETCHUP EXERCISE (5%) – Create 3D objects in Sketchup based on provided information. Upload SKP file.

FURNITURE MODEL (5%) – Create a 3D model of a piece of furniture based on provided information. Upload SKP file. Models can be used to create 3D prints.

DESIGN RECREATION (10%) – Create a 3D model of a scene design based on provided images. Create 3 JPG images of your model. Upload SKP file and 3 JPG images.

FINAL DESIGN MODEL (15%) – Create a 3D model of a scene design based on provided images. Create 3 JPG images of your model. Upload SKP file and 3 JPG images. (GRADUATE STUDENTS: This project will involve a newly created scene design of your own making.)

FINAL DESIGN MODEL (15%) – Create complete ground plan and section drawings in AutoCAD for your final design and create a multi-page PDF file of them on D-size sheets. Combine all files as well as the files from the previous assignment including any updates into a single ZIP file and upload. (GRADUATE STUDENTS: This project will also include elevation drawings and light rendering.)

COURSE POLICIES: Attendance and punctuality are essential to success in this course. Developing digital design skills requires working each class session to build on the material from previous sessions. Tardiness or lack of attendance will adversely affect your ability to learn the material and complete projects. Late assignments will be penalized one letter grade for each day they are late. However, in most cases, after a project has been graded and returned with feedback, students will be allowed to resubmit a revised and corrected version of the assignment within a week for full credit.

ACADEMIC MISCONDUCT: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.



Theatre 5210: Drafting & Modeling SCHEDULE

DATE		TOPIC/ACTIVITY	ASSIGNMENT DUE
Tue.	Jan. 10	Course Overview / AutoCAD intro	
Thur.	Jan. 12	Lines & Shapes	
Tue.	Jan. 17	Lines & Shapes	
Thur.	Jan. 19	Orthographic Projection	Lines & Shapes Exercise Due
Tue.	Jan. 24	Orthographic Projection	
Thur.	Jan. 28	Work Day	
Tue.	Jan. 31	Printing & Exporting	Orthographic Exercise due
Thur.	Feb. 2	Dimensioning & Notation	
Tue.	Feb. 7	Technical Drawings	Dimensioning Exercise due
Thur.	Feb. 9	Technical Drawings	
Tue.	Feb. 14	Drawing Management	Technical Drawing Exercise due
Wed.	Feb. 15	<i>Wilderness opens</i>	
Thur.	Feb. 16	R&J Project	
Tue.	Feb. 21	Work R&J Project	
Thur.	Feb. 23	3D AutoCAD	R&J Drafting Project due
Tue.	Feb. 28	3D AutoCAD	
Wed.	Mar. 1	<i>Everybody opens</i>	
Thur.	Mar. 2	Sketchup Intro	3D Orthographic Exercise
Tue.	Mar. 7	3D Modeling: Objects & Components	
Thur.	Mar. 9	3D Modeling: Objects & Components	Sketchup Exercise Due
Tue.	Mar. 14	--- SPRING BREAK---	
Thur.	Mar. 16	--- SPRING BREAK---	
Tue.	Mar. 21	Furniture Models	
Thur.	Mar. 23	3D Printing	Furniture Model Due
Tue.	Mar. 28	3D Modeling: Textures & Materials	
Thur.	Mar. 30	Work Design Recreation Project	
Tue.	Apr. 4	Work Final Model	Design Recreation Due
Thur.	Apr. 6	Work Final Model	
Tue.	Apr. 11	3D Modeling: Importing/Exporting	Final Design Model Due
Wed.	Apr. 12	<i>MIP Senior Showcase opens</i>	
Thur.	Apr. 13	3D Modeling: Light Rendering	
Tue.	Apr. 18	Work Final Project	
Thur.	Apr. 20	Work Final Project	
Thur.	May 1	10am Final Exam date	Final Design Package Due

CANCELLATION POLICY: In the unlikely event of class cancellation due to emergency, I will contact you via e-mail and request that a note on be placed on the door. In addition, I will contact you as soon as possible following the cancellation to let you know what will be expected of you for our next class meeting.

DISABILITY SERVICES: The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

MENTAL HEALTH: As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkun Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

TITLE IX: Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu.

DIVERSITY: The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

LAND ACKNOWLEDGEMENT: We would like to acknowledge the land that The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and many other Indigenous peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. As a land grant institution, we want to honor the resiliency of these tribal nations and recognize the historical contexts that has and continues to affect the Indigenous peoples of this land.