

THEA 545 Mechanical Drafting

SPRING 2021

Office Hours: Tuesday 8:00a-10:00a & by appointment

Instructor: Jenni Baldwin

E-mail: jbaldwin98@gmail.com

Class Times: Tuesday 3:30p-6:10p

PST

Out of respect for our work together, please turn your camera on at the top of class. No unapproved use of personal devices during class, including no headphones, social media use, e-mailing, texting, or working on work for other classes or productions allowed in class.

I. Course Description

THEA 545 Mechanical Drafting

Theatre drafting standards and techniques. Groundplans, sections, elevations, details, and more. Prerequisites: THEA 240 or admission to M.F.A in Design and Technology.

This is a digital course and will be accessible through a zoom link:

<https://SDSU.zoom.us/j/87594918766>

Based on an original syllabus by David Morong & Charles Murdock Lucas

II. Course Objectives

To introduce students to the industry-standard skills necessary to draft scenery for theatre and present their work in a professional manner.

III. Course Format

This class will often start with a presentation of the work finished the previous week, then a brief lecture and demonstration, followed by a discussion of the day's project. Students will use the remainder of the time to work on the day's project with the guidance of the Instructor. For homework, you will be assigned projects, various tasks (such as finding source material for the next project), and readings. After the lecture and demonstration, class time is drafting time, so please use it well and be on time and ready to work. Students can expect at least 4 hours of time outside of class for homework. Students less familiar with graphical expression will find they need more time.

We will be engaging in group critiques of the work that you produce. Look at these as opportunities to learn from each other and improve your work. Finding areas in which you can improve is a positive thing! Remember that you are here to improve.

I want all of you to think of this class as a safe environment for developing your drafting skills. Please talk with me if you have any concerns about the work.

IV. Student Learning Outcomes

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

- Use their drafting tools (pencil, eraser, triangles, scale rule, etc.) to create plan views of scenic elements.
- Create elevation, section, and detail views of scenic elements.
- Dimension and annotate scenic elements for clear size and placement within a space.

- Create isometric and axonometric views of a scenic element.
- Label scenic elements with professional quality lettering to specify surface finishes, construction needs, textiles, and materials.
- Assemble relevant visual research for the execution of designer drafting.
- Format sheets of scenic drafting to meet professional standards.
- Engage in peer critiques of work and employ professional collegial critique methods as demonstrated by the Instructor.

V. Required and Helpful Texts

Students will be assigned various readings, including from this required text:

• Designer Drafting and Visualizing for the Entertainment World, 2nd Edition by Patricia Woodbridge, Hal Tine ISBN-13: 978-0240818917 ISBN-10: 0240818911

Get the print edition, or have a color tablet handy if you buy the electronic version, so you can easily have both open at the same time.

*There will also be additional readings/handouts assigned throughout the term.

The following texts on drafting are not required for purchase, but are recommended:

• Architectural Graphic Standards for Architects, Engineers, Decorators, Builders and Draftsmen, 1932 Edition (A Reissue of a Design Classic) by Charles George Ramsey, Harold Reeve Sleeper, Harold R. Sleeper, Edited by: Charles Ramsey ISBN-13: 978-0471247623 ISBN-10: 0471247626 Older editions are also available used. The quality of the drawing is excellent for the hand draftsman.

• Architectural Graphic Standards Student Edition: An Abridgement of the 9th Edition Student Edition by Charles George Ramsey, Harold Reeve Sleeper, John Ray Hoke Jr. ISBN-13: 978-0471348177, ISBN-10: 0471348171 – More modern information.

• Architectural Graphics by Francis Ching. John Wiley & Sons. Inc. 2003

• Architectural Drawing and Light Construction by Edward Muller. Prentice Hall Inc. 1985

• The Elements of Style: A Practical Encyclopedia of Interior Architectural Details from 1485 to the Present by Stephen Calloway. Simon & Schuster, NY

• Scenery: Drafting and Construction for Theatres, Museums, Exhibitions and Trade Shows (Theatre Arts (Routledge Paperback) by John Blurton ISBN-13: 978-0878301492, ISBN-10: 0878301496 Great resource for working in Metric. We don't follow these UK drafting conventions in the USA, but an interesting read!

VI. Studio Equipment and Materials (Required as marked.)

• Drafting table or Board, Minimum size is 20"x26" (38"x 60" is standard), covered with borco, a vinyl board cover. Drafting boards are available in class. - Not required, but nice to have to do your drafting homework outside of class. Otherwise you are stuck with your kitchen table, which isn't ideal.

• Tape Measure - Essential.

• 24" or Larger T-square – Essential. (A Parallel Rule is nicer, but pricier)

• Architect's Scale Rule – Essential. Get the USA/Customary style -not metric!

- 12" 45°/90° Triangle, must be clear – Essential.
- 12" 30°/60° Triangle, must be clear – Essential.
- Staedtler Ames Lettering Guide – Essential.
- Adjustable Triangle – Not required.
- Bow (Drawing) Compass – Essential.
- Metal Erasing Shield – Essential.
- Sharp Pencils, (4H, 2H, HB, #2), with manual, high quality, sharpener – Essential.
- Kneaded Eraser – Essential.
- White Plastic Eraser – Essential.
- Non Repro Blue Pencil – Essential.
- Drafting Dots OR Roll of 2" blue painter's tape – Essential.
- Clearprint 1000H Design Vellum Pad with 4x4 fade out grid, 16 lb., 100% Cotton, 18 x 24 Inches, 50 Sheets, Translucent White, (Ground Plans often require larger sizes) – Essential.
- Tracing Paper Roll – also called "Trash" or "Canary Paper" (at least 18") – Essential.
- French Curves – A pack of clear ones is essential.
- Circle and Square Templates – At least one is essential.
- Drafting Brush – Not required, but nice to have.
- Oval Template – Not required, but nice to have.
- ¼" Furniture Template – Not required, but nice to have.
- Emery board or fine sand paper to sharpen compass lead – Not required, but nice to have.
- Drafting Tube (Roll your drawings with the drawing on the OUTSIDE!)
- A Pack of 3x5 Index Cards. Unlined (Blank.)

VII. Grading and Numerical Grading Scale

All assignments are expected to be completed entirely by the individual student, with no sharing of work or effort on the assignment unless expressly given permission by the Instructor. Tracing the work of others constitutes cheating, and both the tracer and the tracee will be dealt with according to standards of Academic Dishonesty.

Your final grade is based on 200 points:

- Class Participation – 2 points per class (30 points total)
- Mid Term – 10 points.
- Drafting Projects – 9 points per project (90 points total)
Graduate Students have higher requirements for each project.
- Groundplan, CL Section, Elevation – 10 points per project (30 points total)
Graduate Students have higher requirements for this project.
- Research Reference Packet, and 3x5 Cards- 10 points each. (20 points total)
Graduate Students have higher requirements for this project.
- Final – 20 points. An in class drafting assignment.
Graduate Students have higher requirements for this project.

If you accomplish all that is required in a satisfactory manner, you can expect to earn a B. To earn an A, your work must go above and beyond the minimum set for the project, and be executed in an exemplary fashion. Work that is incomplete or exhibits minimal effort or limited breadth in thought will earn a C or lower. This is the grading scale:

| Letter Grade | Point Value | Letter Grade | Point Value | Letter Grade | Point Value | Letter Grade | Point Value | Letter Grade | Point Value |
|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| A+ | 97-100 | B+ | 87-89 | C+ | 77-79 | D+ | 67-69 | F | 0-59 |
| A | 93-96 | B | 83-86 | C | 73-76 | D | 63-66 | | |
| A- | 90-92 | B- | 80-82 | C- | 70-72 | D- | 60-62 | | |

VIII. Class Participation and Attendance

Appropriate class participation in this class is measured through the continued growth of your abilities on your drafting, and participation in the group discussions and critiques.

Growing in your drafting abilities requires that you arrive early enough to be ready to work at the top of class. "Ready to Work" means that your assignments are ready to turn in, your drawing table is set up, your tools are ready, and your pencils are sharp. Once class begins, you should always use the in class work time for the active improvement of techniques demonstrated in class.

Participation in class discussions and group critiques requires active engagement. Some of our work together will center on presenting your projects. Presentations will be followed by a group critique, led by the Instructor. The goal of this critique is to give you practice in presenting the work (a vital skill not only in theatre, but also in life), and to test the depth of thought and effort that supports the work. You and your classmates deserve a productive and thoughtful dialogue. Look at every class as an opportunity to learn something new from your classmates and share your own discoveries with them.

I hope that you will learn from each other in this class. You will benefit from sharing with each other through the group critiques. If you see a classmate struggling with a technique, try to help them understand the work, or at least encourage them! If you need help from the Instructor, or a classmate, ask for it! That's what I'm here for. I hope all of you will find this an exciting and interesting place to do good work over the next many weeks. I think you will surprise yourself, if you use your time in class well. You cannot do that if you are absent in body or mind. The Instructor will not go over material you miss if you are late or unreasonably absent.

Attendance is required, but you are not graded on your mere presence. Since the instruction for projects is provided in class, class time is dedicated to working on the projects, and your presentation of the work happens in class. These factors count toward your participation grade.

If you must miss class, email me. Excused absences are only given for university approved reasons.

IX. Turning In Assignments, and Late or Missed Assignments.

Assignments and projects must be turned in at the beginning of the class period on the assignment's due date. Even if you are not presenting your work that day, it is still due that day.

Coursework will be turned in digitally. Name your files so that they can be easily distinguished from your classmates. Example: JBaldwin_THEA545_Project1

Your work must always be labeled with the following information:

Student Name

Class Name

Date

Assignment Title

When emailing me, include:

1. Your name, and the name of the class in the subject of the e-mail.
2. Plan ahead. If you are emailing me with questions/ concerns, it may take some time for me to respond to your e-mail. Don't expect immediate responses the night before a project is due.

Late work will deducted a full letter grade. Work that is more than one class period late will not be accepted unless it is for a University-recognized reason. As theater professionals make a living by meeting deadlines and being present when required; special attention must be paid to assignment due dates, and class attendance.

X. TENTATIVE Course Content Outline and Schedule

(Schedule is subject to change with or without notice by discretion of the instructor)

Every class will begin with a review of the previous week's homework. Be prepared to present your work each week.

| Date | In Class | What's Due |
|----------------|---|--------------------------------------|
| Week 1 1/26 | Introductions. HW: Woodbridge Chs. 1-3 Project 1 Wall Research | |
| Week 2 2/2 | Basic Drawing Techniques. Handout - Basic Geometric Construction HW: Woodbridge Chs. 4 & 5 Project 2 | Project 1- Warm- up Wall Research |

| | | |
|-----------------|--|--|
| Week 3 2/9 | Advanced Drawing Techniques. Handout - Advanced Geometric Construction Lettering HW: Woodbridge Ch. 7 Project 3 | Project 2- Basic Geometry |
| Week 4 2/16 | Orthographic Projection. The Glass Box. True Views. HW: Woodbridge Ch. 8 Project 4 | Project 3-Advanced Geometry |
| Week 5 2/23 | Groundplans, Elevations & Sections HW: Woodbridge Ch. 12 Project 5 | Project 4- Orthographics |
| Week 6 3/2 | Isometric & Axonometric Projection Handout- Finished Plate HW: Woodbridge Chs. 10 & 11 Project 6 | Project 5- Groundplan, Elevations, & Sections |
| Week 7 3/9 | Drawing Conventions. Handout- Sightlines HW: Woodbridge Ch. 15 Project 7 | Project 6- Isometric and Axonometric Drawing |
| Week 8 3/16 | Shading & Detailing HW: Woodbridge Ch. 9 Project 8 | Project 7- A Finished Plate |
| Week 9 3/23 | Dimensioning HW: Woodbridge Ch. 6 Project 9 | Project 8- Details |
| Week 10 3/30 | R & R Day | |
| Week 11 4/6 | Lettering Handout- Hand Lettering HW: Study for Mid-term Select Set | Project 9- Dimensioning |
| Week 12 4/13 | Mid-term. Researching and Preparing the Drawing Package Turning Roughs into Finals The Finished Groundplan HW: Groundplan Notecards, Research Reference Packet | Set Selection |

| | | |
|---------------------|--|---|
| Week 13 4/20 | The Finished Centerline Section Review Mid-term HW: Centerline Section | Groundplan Notecards |
| Week 14 4/29 | The Finished Scenic Unit Drawing HW: Elevation | Centerline Section |
| Week 15 5/4 | Elevation Cont. HW: Project 10 | Elevation |
| Week 16 Date TBD | FINAL | Project 10- Fireplace/ Window Notecards, Research Reference Packet |

XI. Schedule Disclaimer

The schedule of assignments are subject to change according to the Instructor's evaluation of the class's pursuit of the course objectives.

XII. Academic Dishonesty

The SDSU community regards cheating as an extremely serious matter and deals severely with those who violate the standards of academic integrity. Plagiarized work submitted for credit may constitute failing the course, and/or referral to the Center for Student Rights and Responsibilities.

XIII. Canvas

I will post assignments on Canvas and that is where you will upload your work. More info TBD.

XIV. Students with Disabilities

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

XV. Final Thoughts

Drafting may be thought of as a language for collaboration that has specific grammar, spelling, and syntax. Learning a new language is hard! I want all of you to think of this class as a safe environment for developing your drafting skills. Part of the joy of this class is that you are focusing not on "Design" per se, but on the quality of your drafting alone.

Mechanical drawing and “Fine Art Drawing” are two different things, although they are related. Just because you may not be a masterful sketch artist does not mean that you cannot create clear, communicative drafting.

This is a higher level course that requires some previous exposure to Scenic Design, though all of you have different levels of experience and comfort with creating work. None of your work will be perfect, but all of you will improve your work.

Work hard to do the best that you can, but allow space to discover things about yourself and your work. Remember, too, that you and your work are separate. Just because your work may need much improvement doesn't say anything about you as an artist or person.

Everyone can learn how to draft. It's all a matter of attention to detail, following conventions, careful pencil work, and learning how to look at objects. Why should you learn how to draft? Because you can't get it built if you can't draw it.

It may be difficult to understand at times why we should spend so much time developing a manual skill, when the vast majority of design work is now done on the computer. It's important to remember that the shortest distance between an idea and realizing it is the distance from your brain to your hand. Hand drafting is a skill that anyone can learn and practice with some simple tools that will never lose relevance, run out of battery, or crash before saving. Everything that you learn in this class will help you when you move on to using Vectorworks or AutoCAD. Some drafting, even at top levels of the film, theatre, and themed entertainment industry, is still hand drafting.

Based on an original syllabus by David Morong and Charles Murdock Lucas.

XVI. SYLLABUS SIGNING STATEMENT FOR PROJECT 01

HELLO JENNI,

THANK YOU FOR PROVIDING THIS INCREDIBLY INTERESTING AND ENRICHING SYLLABUS. I HAVE READ IT IN FULL AND ASKED YOU ALL THE QUESTIONS THAT I HAVE RIGHT NOW.

I REALIZE I AM RESPONSIBLE FOR READING THE COURSE MATERIALS AND ASKING THE QUESTIONS I NEED ANSWERED TO BE SUCCESSFUL.

SIGNED,
STUDENT (your name)
(date)

MY FAVORITE TV SHOW IS: