# **DES 220 Introduction to Drawing for Designers**

Pino Trogu

Professor, Information Design

www.trogu.com

Syllabus – Fall 2021

**CLASS HOURS**: Online Bichronous Section 1: THURSDAY 9–11:45 AM Section 2: THURSDAY 1–3:45 PM

**OFFICE HOURS:** TUE: 10-12 & 2-4 PM (ZOOM)

email: trogu@sfsu.edu

web: faculty.sfsu.edu/~trogu

San Francisco State University College of Liberal and Creative Arts School of Design

Class website: ilearn.sfsu.edu

Note: individual items in this syllabus are

subject to change.

Last revision: August 13, 2021

## **CATALOG DESCRIPTION**

Introduction to drawing for design professions: graphic design, industrial design, digital media, and marketing.

Learning to draw as learning to see and understand two- and three-dimensional objects, to give form to design ideas and to communicate these ideas to others. (Plus-minus letter grade only — No CR/NC option) [Formerly DAI 220]

## **PREREQUISITES**

None.

## **MISSION STATEMENT**

The School of Design serves a diverse body of students in the areas of Product Design and Visual Communication Design at both the undergraduate and graduate levels. Our curricula emphasize design process as a means of problem solving, and our classes help students to build the technical, conceptual, critical, and collaborative skills required in design professions.

## COURSE MODALITY: ONLINE BICHRONOUS

In-person meetings (via Zoom or Teams) are once a week on Thursdays: Section 1 in the morning and Sec. 2 in the afternoon. Please see the link below to the Online Education Policy, which lists the rights and responsibilities of faculty and students during video meetings:

S21-264 Revision to #F20-264 Online Education Policy

Please see the attendance section in this syllabus for attendance policy details. Class materials are available on iLearn: links to pre-recorded videos, PDFs, and other resources. Email is the preferred mode of communication outside of class times. Students are required to check their SF State email address as all messages will be sent only to those addresses. If your preferred address is not your school address, you must add a forwarding to your account or you will miss communications from the instructor.

## **COURSE DESCRIPTION & GOALS**

This course will introduce you to the practice of drawing and its relationship to design:

Basic vocabulary of drawing: line, volume, light, shadow, depth, contours.

Hand, eye, and body coordination when drawing.

Basic still life drawing of simple objects: boxes, bottles, balls (cube, cylinder/cone, sphere).

Free-hand sketching as well as technical drawing of physical objects.

Integration of drawing and sketching with written annotations.

The three main types of projective representation, including (1) parallel projections; (2) orthographic projections; and (3) perspective.

Drawing as a continuous feedback loop that generates new drawings and ideas.

Drawing by hand will also enhance your computer drawing skills and will help you to understand the processes of 2D and 3D representation. These techniques will help you to prepare professional presentations in your design classes and help you build your design portfolio.

By learning how to draw and sketch, you will gain confidence in your design abilities and you will be able to clearly communicate your ideas and concepts to others.

## **LEARNING OUTCOMES**

After completing this course you should be able to:

- Use different line weights in a drawing to communicate different aspects of the drawing.
- Understand and use drawing techniques deeply rooted in a long tradition of draftsmanship going back to the Italian Renaissance.

- 3. Sketch models, environments, and other objects.
- Produce crisp and clean drawings as part of professional presentations.
- Use sketching as a prototyping environment that permits much faster drawings than with digital tools.
- Use your hands to not only depict existing objects, but also to imagine, and depict objects that do not yet exist.
- Produce professional-looking drawings that will build your confidence in your drawing ability, regardless of your initial skill level.
- Through hand-drawing, enhance your computer drawing skills and understand 2D and 3D representation processes, which are mostly hidden when a drawing is made on the computer.
- Demonstrate the use of drawing tools to produce technical line drawings.
- 10. Demonstrate the use of drawing methods including tracing, making revisions, and scaling.
- Visualize a sectioned cube using progressive sections and transformations from 2D to 3D space.
- Draw the sectioned cube in orthographic, isometric, and perspective projections.
- 13. Construct the sectioned cube using drafting tools, cutter, paper and glue/tape.
- Interpret a technical drawing for the purpose of constructing the object depicted in the drawing.

## **SIGNIFICANCE**

In addition to creating quick ideation sketches, design professionals also need to accurately describe the size and shape of an object or environment, so that it can be physically produced. They produce these drawings with standardized line work, notation and measuring conventions. The foundation of their drawing techniques is rooted in the tradition of pen and ink drawing with me-

drawings.

INSTRUCTION

## Introduction to Drawing for Designers

chanical instruments used by architects and engineers since the Renaissance.

These drawings are sometimes called mechanical drawings, engineering drawings, construction documents, or shop

Knowledge of the traditional techniques taught in this class will strengthen your drawing skills and help you to think more analytically about how to solve design and manufacturing problems.

All demos, videos, and other materials are available in iLearn. Assignments will normally be posted in iLearn one week in advance, usually on Tuesdays. These will include pre-recorded video lessons and demonstrations, PDFs, and/or links

to other online resources. During the live

video session on Thursdays, instructor

will review the assignment, provide ad-

ditional instruction, and clarify issues

that students might bring. As time al-

lows, individual feedback will be given

that benefits the whole class. Although

there will not be individual, public cri-

progress, students are encouraged to

share their work and receive feedback

not only from the instructor but also

tiques of anyone's specific work in

Pino Trogu

Syllabus – Fall 2021

Possible grades for each assignment. Points and corresponding letter grades, rounded to the nearest

San Francisco State University

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School of Design

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Letter/points	5.0	10.0	15.0	20.0	25	30.0	40.0	50
Α	4.8	9.6	14.4	19.2	24	28.8	38.4	48
A-	4.6	9.2	13.8	18.4	23	27.6	36.8	46
B+	4.4	8.8	13.2	17.6	22	26.4	35.2	44
В	4.2	8.4	12.6	16.8	21	25.2	33.6	42
B-	4.0	8.0	12.0	16.0	20	24.0	32.0	40
C+	3.8	7.6	11.4	15.2	19	22.8	30.4	38
С	3.6	7.2	10.8	14.4	18	21.6	28.8	36
C-	3.4	6.8	10.2	13.6	17	20.4	27.2	34
D+	3.2	6.4	9.6	12.8	16	19.2	25.6	32
D	3.0	6.0	9.0	12.0	15	18.0	24.0	30
F	<3.0	<6.0	<9.0	<12.0	<15	<18.0	<24.0	<30

Assignment number – VERY
 IMPORTANT – and title, abbreviated
 when necessary

- 2. Your name
- 3. Course # and teacher's last name
- 4. Assignment due date

Example (all in a single line in the actual drawing — see title block video):
#2 Draw Parallel Lines

John Doe Trogu DES 220 SFSU Aug. 30, 2021

## from fellow students. PROJECTS & GRADES

Final grades will be based on:

- 1. Comprehension and understanding of concepts covered in the course.
- 2. Quality of work during semester.
- 3. Complete assignments by the due dates.
- 4. Attendance

## **DRAWING INFORMATION**

All assignments must be identified with the following information written in the title block. Unless otherwise noted, any drawing missing the title block with this information (and the border) will automatically receive a "D" grade, before other criteria are examined:

#### **LETTER GRADES & POINTS**

Α	96-100
<b>A</b> –	92
B+	88
В	84
B-	80
C+	76
C	72
C-	68
D+	64
D	60
F	59-0

A. Performance of the student has been of the highest level, showing sustained excellence in meeting course responsibilities and personal potential.

- B. Performance of the student has been good, though not of the highest level.
- C. Performance of the student has been adequate, satisfactorily meeting the course requirements.
- D. Performance of the student has been less than adequate.
- F. Performance of the student has been such that course requirements have not been met.

## SFSU grading policy

http://bulletin.sfsu.edu/policies-procedures/grading/#gradingpolicy

## **PASSING GRADE**

A grade of "C" or higher is required to pass the class. Note also that the course does not include the CR/NC option (only plus or minus letter grade).

## **UPLOAD PHOTOS OF DRAWINGS**

All drawings must be uploaded to iLearn for grading. After you finish your drawing, scan your drawing using the available scan application on your phone. If you don't have a scanning app, take a picture under the best possible light and without shadows. Upload the scan or photo under each individual assignment page. If you happen to have a desktop scanner, scan the drawing with that; otherwise a regular app scan or photo is

## Introduction to Drawing for Designers

Pino Trogu

Syllabus – Fall 2021

San Francisco State University College of Liberal and Creative Arts School of Design

Class website: ilearn.sfsu.edu

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OK, provided that distortion is minimal and does not greatly affect the evaluation of the drawing.

## FILE SIZE, NAME SCHEME, AND FORMAT

Unless otherwise noted, file size is 10 MB. Save it and/or export to one of the following accepted file formats: .pdf, .jpg (not .jpeg), .gif, .pct, .docx

The name of your uploaded file must follow this simple scheme, all in lower-case letters: last name + first initial + 2-digit drawing number (leading zero for 1–9) + file extension. So a file that I would submit might be named as follows, including spaces:

trogu p 05.pdf
trogu p 05 rev1.pdf (revised file)

## **GRADING AND CATEGORIES**

The course has five categories with varying weights. Assignments are worth from 10 to 50 points.

1. Line Plane Volume	40%
2. Cube Section	25%
3. Perspective	25%
4. Portfolio PDF	5%
5. Attendance	5%
TOTAL	100%

The assignment points for the course total 1,000, making each drawing assignment exactly proportional to its individual worth in the course (removing one digit at right) so that a drawing worth 20 points is equal to 2% of the total course grade which is 100%; a 30-point drawing is worth 3%, and so forth.

In iLearn you can check grades for individual assignments, for each category, and for the overall course, displayed at the top of the grades page.

## **NO LATE WORK**

Late work will not be accepted. Extensions might be granted on an individual basis after compelling reasons have been verified. Unless otherwise noted, assignments will always be due on Tuesdays at 10 pm.

## **TRACKS**

As students come to this course with varying levels of experience, some assignments in the Cube Section category give the option of simpler or more complex designs. The assignments are worth the same points, whether they are numbered X or Xa (2x2 or 4x4 grid). Empty grades in any listed assignment will not affect your grade.

## **WORK REVISIONS**

Initial grades on all assignments turned in on time can be improved later.

During the semester, graded assignments that were turned in on time can be revised and will be re-graded up to a maximum of the next letter grade from the initial grade. Make corrections on the original sheet or submit revisions along with the original work, or both. You must alert me to any revised work or I will miss it otherwise. Also, add "rev1" to the name of the revised file as noted above.

## **ATTENDANCE**

Attendance in the Thursday video meetings is required and encouraged but this category is only worth 5 percent of the total course grade, roughly the equivalent of one step in the overall grade scale, where every step is worth 4 points. So for example if your course work is absolutely perfect and you get straight As and full points for each assignment, but you miss all video meetings and you get zero points in the attendance category, your final grade would still be A-, but not quite A.

Of course, depending on each individual context and quality of work, the 5 percent difference might be critical and mean the difference between passing or failing the class. So if your total work is worth only C— but you have perfect attendance, your final grade would be a passing C. Please note that starting in Fall 2021, all design courses must earn a minimum grade of C in order to count toward graduation.

Missing the live session also means missing the direct instruction and direct feedback which cannot be provided in the same manner even if the videos are of high quality. There will be 15 video meetings total in the semester, including one during final exams week, but excluding Thanksgiving week and Veterans day which also falls on a Thursday.

Total attendance points: 50 pts
Each absence = 3 pts
Each tardy or leave-early = 1 pt
(1/3 absence)
(3 tardies or leave-early = 1 absence)

If you miss 7 meetings (21 points) — non-excused absences or a combination of absences / tardies / leave-early, your resulting attendance grade of 29/50 will equal to F in the category. In my normal in-person course, this could equal either an F or D for the course, however in this course's bichronous modality, it just means that your overall grade will be lower by the exact percentage of points missed in the category (in the example: 21/1000 points or 2.1 percent of overall grade.)

Attendance will be taken at the start of the video session and again at the end of the session. Students will be required to verbally respond when their names are called (audio connection is sufficient, video image is not required) both at the beginning of the class and at the end. Missing the beginning or end call will equal 1 point each (tardy or leave-early); missing both will equal 3 points (absent).

See the link below for a table of attendance points and letter grades.

attendance\_points\_&\_letter\_grade\_2021.pdf

Tardy means connecting after roll has been taken. Leave early means disconnecting before roll is taken at the end. If you need to leave early for any compelling reason please ask in advance.

## Introduction to Drawing for Designers

Pino Trogu

Syllabus – Fall 2021

Excused absences include being sick or other major events that prevent you from connecting. You must email me in advance if you know you can't connect for those reasons or email me as soon as possible if you feel sick that day. Needless to say, it will be impossible for me to verify the truthfulness of every such communication. At the end of this syllabus, you will find an honor pledge that I ask everyone to sign. It covers issues of cheating and other dishonest behavior, which can cause you, if discovered of such behavior, to get a failing grade on an assignment, a failing grade on the course, or other action depending on the specific issue.

## **VIDEO CONNECTION AND RECORDINGS**

Video connection on the part of the students is not required - audio connection is sufficient - however it might be needed if the student wants to share their work in order to receive feedback. As most video demonstrations will be prerecorded and uploaded online, the live sessions will not be recorded by default. In the event that a particular segment is recorded, that recording will be posted on Box which will only be viewable by the students in the course. For any other recording situation, including those that might require permission from the students to post the videos outside of SFSU intranet system, please refer to the Online Education Policy mentioned above. The link is reprinted below:

S21-264 Revision to #F20-264 Online Education Policy

## **ILEARN RESOURCES**

All course materials, PDF documents and links to videos on YouTube, Box, or Zoom servers will be available through iLearn. You are expected to be up to date with the postings and other materials posted in iLearn.

## **BASIC (REQUIRED) SUPPLIES**

Drawing instruments, materials, and tools. Approx. \$40 to \$80 depending on quality.

For professional results, items 1–11 below are essential. The two drafting triangles and compass are absolutely needed. Drawings which are required to be drawn with the triangles and straight edge will not be accepted if drawn free-hand without tools.

See this **tools and supplies video** and this **visual list (PDF)** for details.

- 1. Staedtler lead holder 2mm lead
- 2. Drafting triangles set (2): 6" 45/45 & 9" 30/60
- 3. Drafting compass (circles up to 9")
- 4. Steel 15" straight edge
- 5. Staedtler Mars Plastic Eraser
- 6. Olfa 180 cutting knife snap blade
- 7. Lumograph Pencil B for sketching
- 8. Drafting paper pad 9x12
- 9. Tracing paper pad 9x12
- 10. Sketching paper pad 9x12
- 11. Painter's (masking) tape
- 12. Scotch (magic) tape
- 13. Sandpaper or sandpaper pad
- 14. Pencil sharpener
- 15. Elmer's white glue

## SUGGESTED (BUT NOT REQUIRED) SUPPLIES

- 1. Alumicolor aluminum T-square 18"
- 2. Alvin 8.5x12 cutting mat
- 3. Staedtler 2H 2mm drawing lead
- 4. Staedtler rotary lead sharpener
- 5. Pencil sharpener (Blackwing)
- 6. Palomino Blackwing 602 pencils
- 7. Mirado Black Warrior pencils
- 8. Staedtler drafting dots
- 9. Bone folder (for bookbinding)
- 10. Micron pens 0.3 mm
- 11. Verithin color pencils
- 12. Prismacolor color pencils
- 13. Shaedler precision rules
- 14. Architect's scale
- 15. Drafting board, with or without a parallel straight edge

Art supply stores in the Bay Area:

- 1. Arch 10 Carolina St, SF
- Artist & Craftsman 2573 Shattuck Avenue, Berkeley

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Last revision: August 13, 2021

- 3. Blick Art Materials 1930 Van Ness, SF
- 4. Flax Fort Mason Center, SF

#### RECOMMENDED BOOKS

Koos Eissen and Roselien Steur Sketching: The Basics

Koos Eissen and Roselien Steur Sketching: Drawing Techniques for Product Designers

Francis D. K. Ching Architectural Graphics

Francis D. K. Ching and Steven P. Juroszek, *Design Drawing* 

Kevin Henry Drawing for Product Designers

Alan Pipes, Drawing for Designers

Kurt Hanks, Rapid Viz

Mike Lin

Drawing and Designing with Confidence

Kimon Nicolaïdes The Natural Way to Draw

Betty Edwards Drawing on the Right Side of the Brain

Mario Bollin, Zeichnen (in German)

Manfred Maier

Basic Principles of Design. The Foundation Program at the School of Design, Basel, Switzerland

## **DRAWING LINKS**

(includes rapid visualization links)

Trogu: drawing youtube playlist

Trogu: youtube rapid viz playlist

sketchingskills.com

sketch-a-day.com

beloose.com

michaelditullo.com

ryanchurch.com

carlliu.com

ralphmcquarrie.com

sydmead.com

drawthrough.com

## RECOMMENDED BOOKSTORE

William Stout Architectural Books 804 Montgomery, SF

stoutbooks.com

## Introduction to Drawing for Designers

Pino Trogu **Syllabus – Fall 2021** 

San Francisco State University College of Liberal and Creative Arts School of Design

Class website: ilearn.sfsu.edu

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## **CHEATING & PLAGIARISM**

Please read the Honor Pledge at the end of this syllabus. Sign and email me a copy of the last page at the beginning of the second week of instruction to acknowledge that you have read the pledge and confirm that you will abide by it throughout the course.

Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another to do so. Typically such acts occur in relation to examinations. However, it is the intent of this definition that the term "cheating" not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means.

Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the materials (i.e. their intellectual property) so used as one's own work. Penalties for cheating and plagiarism range from a zero or "F" on a particular assignment, through an "F" for the course, to expulsion from the university. For more information on the University's policy regarding cheating and plagiarism, refer to the University Catalog (Policies and Regulations).

Information about the College of Liberal & Creative Arts policy and procedures regarding plagiarism can be found at the following URL:

http://lca.sfsu.edu/faculty/
plagiarism-resources

Code of Best Practices in Fair Use for the Visual Arts, Published by the College Art Association:

http://online.sfsu.edu/sketch/320/best-practices-fair-use-visual-arts.pdf

Also:

http://fairuse.stanford.edu/overview

https://en.wikipedia.org/wiki/Fair\_use

## **DISABILITY POLICY**

Students with disabilities who need reasonable accommodations are encouraged to contact the instructor. The Disability Programs and Resource Center (DPRC) is available to facilitate the reasonable accommodations process.

The DPRC is located in the Student Services Building and can be reached:
By telephone: voice (415) 338–2472
By videophone: (415) 335–7210
By email: dprc@sfsu.edu

## STUDENT DISCLOSURES OF SEXUAL VIOLENCE

Website: sfsu.edu/~dprc

SF State fosters a campus free of sexual violence including sexual harassment, domestic violence, dating violence, stalking, and/or any form of sex or gender discrimination. If you disclose a personal experience as an SF State student, the course instructor is required to notify the Title IX Coordinator by completing the report form available at this website:

http://titleix.sfsu.edu By email: vpsaem@sfsu.edu By calling: 415–338–2032

To disclose any such violence confidentially, contact:

The SAFE Place: (415) 338-2208

http://www.sfsu.edu/~safe\_plc/ Counseling and Psychological Services Center: (415) 338-2208

http://psyservs.sfsu.edu/

For more information on Title IX, on your rights and for available resources:

http://titleix.sfsu.edu

## OBSERVANCE OF RELIGIOUS HOLIDAYS

The Academic Senate Policy on the Observance of Religious Holidays (S09-212) indicates that: "The faculty of San Fran-

cisco State University shall accommodate students wishing to observe religious holidays when such observances require students to be absent from class activities..." The following is a link to an Interfaith Calendar, which lists "Primary sacred times for world religions":

interfaith-calendar.org

Complete details regarding this Policy, including implementation can be found on the Academic Senate website:

senate.sfsu.edu/content/policyobservance-religious-holidays

## **ILEARN CLASS WEBSITE / SUPPORT**

https://ilearn.sfsu.edu/ay2122/
course/view.php?id=7126

The iLearn help desk is open Monday through Friday, 8am to 5pm. Feel free to contact them:

By email: ilearn@sfsu.edu By phone: (415) 405–5555

## DROPPING CLASS AND WITHDRAWING

Through the third week of classes, students may drop a class or faculty may drop students "who do not attend the first class meeting or do not meet the course criteria" as specified in the Bulletin. Afterwards, please be aware that a WU (unauthorized withdrawal) grade is counted as an F for GPA purposes. To avoid a WU grade, you are encouraged to drop before the end of the third week if you think you will not be able to "meet the course criteria."

In Fall 2021, that deadline is Monday, September 13.

From the beginning of the fourth week through the twelfth week of instruction, withdrawal from a course will be permissible, for serious and compelling reasons, by consulting the faculty member teaching the course. The student must complete a "Petition for Withdrawal from Course or University" and submit

## **Introduction to Drawing** for Designers

Pino Troqu Syllabus – Fall 2021

Note: individual items in this syllabus are subject to change. Last revision: August 13, 2021

the petition to the instructor for a decision. Such approved withdrawals will result in a "W" grade, which does not affect your GPA.

The full university rules regarding withdrawals can be found at:

http://senate.sfsu.edu/policy/ withdrawal-courses

You, the student, are responsible for withdrawals and should be aware of relevant deadlines related to the withdrawal process. All important dates are listed in the Academic Calendar for the specific semester:

https://webapps.sfsu.edu/public/ webcal/acadcalendar

The Liberal and Creative Arts College's policy on withdrawals and grades of incomplete can be found at:

http://advisinglca.sfsu.edu/ withdrawal-policy

## **COVID19 INFORMATION**

See link below for recent university policy regarding COVID19 safety, especially if you are taking classes that have inperson physical meetings scheduled during the semester.

Policy Resolution #SU20-292 Temporary Changes to #F10-257 Syllabus Policy to Enhance COVID-19 Communication

https://senate.sfsu.edu/policy/ policy-resolution-su20-292temporary-changes-f10-257syllabus-policy-enhance-covid-19

## **RIGHTS AND RESPONSIBILITIES**

We have placed a lot of emphasis in this country on the idea of people's rights. That's how it should be, but it makes no sense to talk about rights without also talking about responsibilities.

> from The Last Lecture by Randy Pausch

To paraphrase from Prof. Pausch's book, this syllabus is an agreement between you, the student, and myself, the teacher.

You have the responsibility to be honest in your work and work constructively with the teacher and the other students. In return, you have the right to be in the course and receive constructive feedback from the teacher. This will be in the form of grading and comments on the assignments or communication via email, in addition to direct instructor feedback and support during the live video meetings, or through other means allowed by the online bichronous for-

I will read every email – the preferred mode of offline communication - and will try to respond promptly to the best of my ability.

## **HONOR PLEDGE**

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College of Liberal and Creative Arts

I pledge on my honor that I will complete all the assignments in this course in full honesty and without the improper help from others. In addition, I pledge to be honest with regards to the attendance policy, and request absences to be excused only if they are truly due to sickness or other serious circumstances, and I accept responsibility for any other unexcused absence and its resulting point deductions.

In regards to course work, I pledge that unless the assignment already includes some form of copying, tracing, or reproducing an existing pattern or drawing, I will not simply copy or trace the drawing examples found in iLearn's images or PDFs and present them as my work. Also, I will not copy or trace drawings seen in the video tutorials and present them as my original work. I will consult with the instructor in advance for clarification that might be needed for a particular assignment with regards to this process.

I pledge to follow the above processes and be honest about my work in this course throughout the semester.

I have read and I agree to the syllabus and to the honor pledge above.

Signature	
Print name:	
Date:	

During the second week of instruction, email the instructor a copy of just this last page, signed and dated, to:

trogu@sfsu.edu