

**ARTS 115: Drawing for Visualization**

FALL'15

Dick Davison

[rdavison@viz.tamu.edu](mailto:rdavison@viz.tamu.edu)**I. COURSE DESCRIPTION****ARTS 115. Drawing for Visualization. (2-3). Credit 3.**

Investigation of and practice with tools, methods and techniques available for communication of designs; drawing, graphics, rendering and color. Prerequisite: Visualization majors only.

**II. INTRODUCTION**

You are living in a time that historians will likely call the electronic, or digital revolution. The computer is changing professions so rapidly that literature on various subjects is obsolete almost as quickly as it reaches its audiences. The design professions have been changed profoundly in this volatile environment, and in so doing; traditional ways of seeing are challenged by new means of making images. Modeling software has changed the very nature of presenting of 3-dimensional ideas. Digital cameras and 2D programs have changed photography as radically as when motion was introduced to that discipline. Indeed, this department exists largely because of the vital need to address the nature and issues related to the spectrum of new media permeating modern culture.

It is in this historical context, in which one might challenge the very relevance of *any* manual activity, that we address the nature of drawing. In short, why draw? During this course you will find that drawing is arguably more valid as a design and imaginative medium than ever before. As the computer occupies an increasingly greater segment of the "art/design pie", and the role of the artist/designer becomes increasingly focused, one must ask, "Where do creative ideas come from?" How does drawing interface with the computer in this new milieu? These and other questions will be addressed in this course.

**III. LEARNING OUTCOMES**

1. Produce pictorial spaces, real and imagined.
2. Explore and employ the human point of view: Perspective; proportion; eyelevel; vanishing points; subjective/objective constructed space.
3. Recognize and interpret form and light in the drawing context.
4. Demonstrate competency in the construction of rational spaces.

5. Demonstrate several drawing systems related to the construction of the above spaces.
6. Recognize and explain fundamental principles of color theory
7. Solve specific design scenarios applying drawing principles
8. Distinguish and demonstrate the aspects of a variety of drawing media, including graphite, pen, charcoal, pastels, others as directed.
9. Experiment with alternative means, such as collage and mixed media, and discuss other ways of making and thinking about art.
10. Analyze, evaluate and apply criticism as a means to develop creative works and personal expression.

### Core Curriculum Learning Outcomes

	1	2	3	4	5	6	7	8	9	10
Critical Thinking	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
Communication	<input checked="" type="checkbox"/>									
Teamwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Personal Responsibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
Social Responsibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							

### Weave Assessment Learning Objectives

	1	2	3	4	5	6	7	8	9	10
To Stimulate Visual Thinking	<input checked="" type="checkbox"/>									
To Nurture Design Skills	<input checked="" type="checkbox"/>									
To Enhance a Multidisciplinary Focus	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To Encourage Collaborative Behavior	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
To Strengthen Ethical Behavior	<input type="checkbox"/>	<input checked="" type="checkbox"/>								
To Improve Personal Responsibility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					

## IV. COURSE SCHEDULE

Topics for the course are listed below. Other material may be presented depending on class interaction and problem contexts. Project assignments related to topic areas will be completed during the lab portion of the course.

**Week 1:** Introduction; discussion of materials and class structure; the nature of vision; horizon lines & vanishing points, siting drawing

**Week 2:** Continuation of siting drawing, one point and multiple-point methods; historical connections, field of view/cone of vision

**Week 3:** Drawing in "wide angle"; 180 and 360 field of views; drawing quality in relation to line quality; presentation/examples.

**Week 4:** Introduction to charcoal drawing, issues related to drawing form in space, aspects of the medium of charcoal; emphasis on material; emphasis on light; traditional still life drawing; drawing people.

**Week 5:** Introduction to pastel with respect to charcoal; discussion and exercises with pastel in relation to color and light.

**Week 6:** Introduction to issues related to drawing imagined spaces; introduction to linear perspective using a one-point grids; exercises and presentations.

**Week 7:** One point grids (continued) introduction to orthographics, specifically plans, elevations, and sections; exercises and presentations.

**Week 8:** Grids and orthographics; major project incorporating the combined principles of orthographics and one-point perspective.

**Week 9:** Introduction to shadow constructions; components, definitions, and principles. presentation and exercises.

**Week 10:** Shadows continued; final assignments. Introduction to 3D modeling with respect to geometric forms and shadow configurations.

**Week 11:** Introduction to alternative drawing constructions; reflections and paraline drawings, specifically axonometrics and obliques.

**Week 12:** Final project introduction, presentation; student research and work in class.

**Week 13:** Final projects continued, desk crits and work in class

**Week 14:** Reviews

## **V. GRADING AND EVALUATION:**

Your grade will be based upon the following items:

As an aide to understanding the method by which your assignment are evaluated, read the following carefully. The actual grading criteria will be related to these categories.

F: 60 and below: The student work is unresolved; the intentions are unclear and major criteria or goals lack resolution; Presentation is incomplete and/or of poor quality; There is a complete lack of problem solving intent, artistic content and/or visual merit.

D: 60 - 70 : The solution has problems in two or more major areas; Skill and problem development is marginal or incomplete; The project lacks imagination and/or design/artistic potential.

C: 70 – 80: The student has solved the problem, but the solution lacks depth of understanding; Some program goals not completely satisfied and the solution contains little promise even though most issues have been addressed.

B: 80 - 90 : The student work shows imagination and potential; Presentation and visual content is good; Program requirements are fulfilled but in need of more refinement or development; There are no major issues that would require a total redesign of the project.

A: 90 – 100: The student work has imagination and the solutions to the problems show understanding and thought; The problem solution is highly developed and well presented; The entire project shows depth and breath and is well coordinated; The project potential has been achieved.

**Attendance:** The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused and unexcused absences are located on-line at <http://student-rules.tamu.edu/>.

## VI. REQUIRED MATERIALS

Straight edge (to be discussed)  
30/60 degree triangle and/or 45 degree triangle  
18 x 24 drawing paper  
smaller size drawing pad (to be discussed)  
pencils HB-6B  
pens (to be discussed)  
charcoal pencils and sticks (to be discussed)  
erasers - kneaded  
water color pencils (to be discussed)  
soft pastels (suggest 24)  
fixative

TEXT: The recommended texts for this course are:

*Lessons in Classical Drawing*, Juliette Aristides, Watson Guphill  
*Architects Draw*, Sue Ferguson Gussow, Princeton Architectural Press  
*Drawing from Observation, 2<sup>nd</sup> Edition*, Brian Curtis, McGraw Hill

## VII. COSTS

There will be additional materials that you will need as we move through the course as well as some optional equipment that you may be interested in acquiring.

This course should cost \$75 to \$150 depending on where you buy your materials, texts, what you already have, and the particular brands you buy. We will discuss this in class.

**VIII. *Disabilities Act:*** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities, in Room B118 of Cain Hall or call 845-1637.

***Copyright:*** The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, lab problems, in-class materials, review sheets and additional problem sets and the contents of the class Web site. Because these materials are copyrighted, you do not have the right to copy the handouts, unless you are expressly granted permission. You have permission to make printouts of the on-line class notes and the class web site strictly for your use in this class.

***Plagiarism:*** In this course, we want to encourage collaboration and the free interchange of ideas among students and in particular the discussion of reading and writing assignments and review questions, approaches to solving them, etc. However, we do not allow plagiarism, which, as commonly defined, consists of passing off as one's own the ideas, words, writings, etc. that belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you have the permission of that person. Plagiarism is one form of scholastic dishonesty. If you have questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section on Scholastic Dishonesty.

**Aggie Honor Code:** “An Aggie does not lie, cheat or steal or tolerate those who do”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information please visit: [www.tamu.edu/aggiehonor/](http://www.tamu.edu/aggiehonor/).