San José State University  
Department of Design  
dsIT 102, Computer Graphics for Interior Architecture, Spring, 2016

Course and Contact Information

Instructor: Kent Wilson
Office Location: IS 201
Telephone: 706-573-2380
Email: kenneth.wilson@sjsu.edu
Office Hours: W 2:30 pm-3:30 pm, alternative times by appointment
Class Days/Time: M/W 3:30p.m.-6:20p.m.
Classroom: IS 240

Course Description

This class focuses on the examination of software applications that relate to the development of architectural modeling, projection, delineation and presentation of form and space using 3D modeling and 2D presentation software to be specified by the instructor. Exercises build on the understanding of the logic inherent to deployed techniques and constructed geometry. This includes the fundamentals of Euclidean and non-Euclidian geometric principles, the proper construction of plan/section/elevation axonometric and perspective drawing through the use of advanced 3D modeling digital media. Students will also learn 3D rendering techniques and explore various methods of and materials used 2D presentation.

Learning Outcomes

At the end of this course students will understand:

1. How to use creative thinking in order to present a variety of ideas, approaches, and concepts.
   a. Employ appropriate representational media, including computer technology, to graphically convey their design ideas.
   b. Employ formal ordering systems and understand the fundamentals of visual perception and the principles and systems of order that inform two dimensional architectural composition and design.
   c. Formulate two and three dimensional digital design visualizations and representations including but not limited to renderings, plans, sections, elevations.
   d. Proper delineation and selection of lines, weights, styles, colors, patterns, hatches etc. appropriate for communicating designs, construction assemblies and finishes.
e. Use appropriate software such as modo, photoshop or illustrator to communicate project proposals.
f. Create composite presentations, in both book and poster format, that communicate one’s design thinking ability, technical skills, experience and project content.

2. How to engage in multi-disciplinary collaboration. Students work in team structures and dynamics and learn the nature and value of integrated design practices.

3. How to apply a variety of communication techniques and technologies appropriate to a range of purposes and audiences and develop ability to express ideas clearly in oral and written communication.

a. The value of and develop the skills necessary for critiquing and evaluating presentations.

Required Reading:

*The Portfolio: An Architecture Student's Handbook* by Igor Marjanović, Katerina Rüedi, Lesley Naa Norle Lokko · Architectural Press

Library Liaison

Rebecca Feind  408.808.2007  
Associate Librarian, Dr. Martin Luther King, Jr. Library  
Liaison to the School of Art and Design  
San Jose State University

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in University Policy S12-3 at http://www.sjsu.edu/senate/docs/S12-3.pdf.

The course is organized around lecture and lab work: lectures will introduce topics and assignments and provide an overview of issues and outline the design principles and communication concepts that are expected to be investigated. Labs will be a period of focused exploration of design issues and communication skills. Finished projects and work in progress will be presented and discussed during each class session to make important points about design. Each pin up will be graded. It is expected that your work will be printed out and pinned up within the first 15 minutes of class. If it is not you will receive a grade of 0 for that assignment.

Your final grade for this class will be based on class participation in reviews and labs and the successful completion of assignments. The assignment grade will be based on a set of criteria including the thoughtfulness and originality of the concept, rigorous and iterative experimentation, the application of the design principles you have learned, and the time and care you have invested in making models, final objects, renderings and presentations.

<table>
<thead>
<tr>
<th>Breakdown</th>
<th>100 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precedent</td>
<td>5%</td>
</tr>
<tr>
<td>Exercise 1: Form</td>
<td>5%</td>
</tr>
<tr>
<td>Exercise 1: Lighting</td>
<td>5%</td>
</tr>
</tbody>
</table>
Exercise 2: Image Mapping /Stencils / Displacements 5%
Exercise 3: Fur / Replicators 5%
Project 1: Dining by Design 20%
Project 2: Portfolio 40%
Class Participation: 15%

Class Participation will be based on preparedness for in class desk critiques and pin ups and your role in the group project.

Grading Percentage Breakdown

97-100 = A+
93-96 = A
90-92 = A-
87-89 = B+
83-86 = B
80-82 = B-
77-79 = C+
73-76 = C
70-72 = C-
67-69 = D+
63-66 = D
60-62 = D-
59 and below = F

A- Excellent. Indicates work of a very high character; the highest grade given. This grade is reserved for work that shows leadership and inspiration, demonstrating significant insight developed to its fullest extent and presented with exquisite craftsmanship.

B- Good. Indicates work that is definitely above average, though not of the highest quality. This work shows thorough exploration and development, and is well presented with good craftsmanship, but it may not rise to the highest level of excellence.

C- Fair. Indicates work of average or medium character. Work in this category demonstrates complete fulfillment of the stated requirements and an understanding of the issues covered, but does not exceed the expectations of understanding, development, or execution.

D- Pass. Indicate work below average and unsatisfactory. The lowest passing grade. Though work may meet the minimum requirements, it lacks depth, development or is unsatisfactorily crafted.

F- Fail. Indicates work that the student knows so little of the subject that it must be repeated in order that credit may be received. Work in this category may be unfinished, unimaginative, underdeveloped or poorly executed, and shows minimal understanding of issues.

Required Materials:
You will need a laptop that is powerful enough and meets the minimum requirements to run the appropriate software for this class.

SOFTWARE:
Modo 901
MeshMixer
Photoshop
Adobe Illustrator

You may purchase the student version of MODO 901.online at: https://www.thefoundry.co.uk/products/modo/
You MUST have the educational version of MODO 901 installed on your computer by the second class.

Photoshop and Illustrator are part of the Adobe Creative Suite and are now free to SJSU students.

Meshmixer is free and can be downloaded at: http://meshmixer.com.

You will use these software applications for the rest of your academic career and newer versions and variations of them as you move into the profession. They are mandatory, and no designer can expect to be gainfully employed without working knowledge of these tools today.

Students will also be responsible for purchasing material as required for assignments. Materials may include: pens, pencils, paper, wood, cement, acrylic, adhesives, plastics, foamcore, plaster, fastening hardware, aluminum, wax prints, cornstarch prints and other materials suitable for model making, high quality paper for print outs, and professional printing services.

The following is a list of materials that you will need to have available to you throughout the semester. These are materials that you will continue to use throughout your education and career.

Architectural Scale

Cutting knives:  Olfa and X-acto knife and blades
Drafting tape or draft dots
Erasers:  Mars white plastic #526-50
Glues:Hot glue gun and glue sticks,
Elmer’s Glue
Lead pointer (handheld)
Lead holder (at least 2) – retractable
Leads:  H, HB, 2H, 4H, 6H
Push pins
Sketching pencils (variety)
Steel Cutting Edge (14” with cork backing and 36”)
Tracing paper rolls (bum wad):
10” adjustable triangle, 30/45/60

NOTE that University policy F69-24 at http://www.sjsu.edu senate/docs/F69-24.pdf states that “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”
Classroom Protocol

Teaching is a two-way dialogue. Attendance is expected at all class sessions and the student’s presence throughout the entire class time is required. Whenever possible, the professor should be notified in advance of a student’s inability to attend a class. In the event the professor is late for class, students are authorized to leave after a half hour wait. It is important to be on time and to be present. It is possible to produce “A” work in the class yet receive a lower grade due to poor class participation and attendance. Students must be present for in class critiques, students who arrive late will not be allowed to present.

If you miss a class, it is your responsibility to find out what you missed BEFORE the next class. Technical demos and lectures will not be repeated for students who miss a class. Projected critique dates will be given to you in advance; however, in some instances these may change due to extenuating circumstances. It is your responsibility to find out about any announcements made in class, by communicating with your classmates.

Students are expected to attend all meetings for the course, as they are responsible for material discussed therein, and active participation is frequently essential to ensure maximum benefit to all class members.

Deadlines will be made available to you in class. Any work not turned in on the date it is due is considered late. Ten percent will be deducted from the grade for every class period it is not turned in. Special circumstances will be taken into consideration (e.g. Illness, court appearance, death of a relative.) All assignments must be completed and turned in to receive a passing grade for the class. The instructor reserves the right to alter assignments and change project due dates with sufficient notice to the students.

University Policies

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material

• “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”

• “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”
Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

Accommodation to Students' Religious Holidays

San José State University shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class. It is the responsibility of the student to inform the instructor, in writing, about such holidays before the add deadline at the start of each semester. If such holidays occur before the add deadline, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed. See University Policy S14-7 at http://www.sjsu.edu/senate/docs/S14-7.pdf.

Course Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics, Readings, Assignments, Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb. 1</td>
<td>Precedent Assigned&lt;br&gt; InDesign template given&lt;br&gt; Furniture Tutorials given</td>
</tr>
<tr>
<td></td>
<td>Feb. 3</td>
<td>Modo Tutorial 1&lt;br&gt; Modo Tutorial 2&lt;br&gt; Review Precedent progress in groups</td>
</tr>
<tr>
<td></td>
<td>Feb. 8</td>
<td>Exercise 1 Assigned: Form&lt;br&gt; Modo Tutorial 3</td>
</tr>
<tr>
<td></td>
<td>Feb. 10</td>
<td>Exercise 1 Due, Exercise 2 assigned: Image Mapping&lt;br&gt; Modo Tutorial 4</td>
</tr>
<tr>
<td>2</td>
<td>Feb. 15</td>
<td>Exercise 2 Due, Exercise 3 assigned: Replicators&lt;br&gt; Modo Tutorial 5</td>
</tr>
<tr>
<td></td>
<td>Feb. 17</td>
<td>Exercise 3 Due, Exercise 4 assigned: Lighting&lt;br&gt; Modo Tutorial 6&lt;br&gt; Modo Tutorial 7</td>
</tr>
<tr>
<td>3</td>
<td>Feb. 22</td>
<td>Exercise 4 Due, Project 1 Assigned: Dining by Design&lt;br&gt; Modo Tutorial 7</td>
</tr>
<tr>
<td></td>
<td>Feb. 24</td>
<td>Modo Tutorial 8&lt;br&gt; Desk Critiques</td>
</tr>
<tr>
<td>5</td>
<td>Feb. 29</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>Week</td>
<td>Date</td>
<td>Topics, Readings, Assignments, Deadlines</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Mar. 7</td>
<td>PIN UP</td>
</tr>
<tr>
<td></td>
<td>Mar. 9</td>
<td>Layout tutorial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>7</td>
<td>Mar. 14</td>
<td>PIN UP</td>
</tr>
<tr>
<td></td>
<td>Mar. 16</td>
<td>Fabricate Model</td>
</tr>
<tr>
<td>8</td>
<td>Mar. 21</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td></td>
<td>Mar. 23</td>
<td>Project 1: Dining by Design Due — Presentation with Final Model</td>
</tr>
<tr>
<td>9</td>
<td>Mar. 28</td>
<td>No Class – Spring Recess</td>
</tr>
<tr>
<td></td>
<td>Mar. 30</td>
<td>No Class – Spring Recess</td>
</tr>
<tr>
<td>10</td>
<td>Apr. 4</td>
<td>Project 2: Portfolio Assigned</td>
</tr>
<tr>
<td></td>
<td>Apr. 6</td>
<td>InDesign Tutorial</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>11</td>
<td>Apr. 11</td>
<td>Pin UP</td>
</tr>
<tr>
<td></td>
<td>Apr. 13</td>
<td>Review binding methods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>12</td>
<td>Apr. 18</td>
<td>Pin UP</td>
</tr>
<tr>
<td></td>
<td>Apr. 20</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>13</td>
<td>Apr. 25</td>
<td>Pin UP</td>
</tr>
<tr>
<td></td>
<td>Apr. 27</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>14</td>
<td>May 2</td>
<td>Pin UP</td>
</tr>
<tr>
<td></td>
<td>May 4</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>15</td>
<td>May 9</td>
<td>Pin UP</td>
</tr>
<tr>
<td></td>
<td>May 11</td>
<td>Desk Critiques</td>
</tr>
<tr>
<td>16</td>
<td>May 16</td>
<td>Project 2: Portfolio Due</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Portfolio Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Exam</td>
</tr>
<tr>
<td></td>
<td>May 24</td>
<td>2:45 PM</td>
</tr>
</tbody>
</table>