Course Description
Experience both Cutting-edge and traditional methods and materials to enhance the planning stages and the realization of theatrical design.

Learning Objectives
- Students will expand their knowledge and proficiency of current digital technology used to aid the design process and enhance communication of their designs. By deepening their understanding of the basic materials, methods and techniques utilized within the industry of entertainment design students can better strategize fabrication needs during the design and production process.

Required Readings and Supplementary Materials
Purchase:
- Design lab account must be paid for during 1st week of classes
- Introduction to Theatrical Design & Production, 7th Edition by Gilette
- Model Making: Materials & Methods by David Neat
- Designer Drafting and Visualization, 2nd Edition by Patricia Woodbridge

For Reference:
- Folding Techniques for Designers by Paul Jackson
- The Art of Manipulating Fabric by Colette Wolff
- Computer Visualization for the Theatre by Garvin Carver/Christine White
- Model Making: Conceive, Create and Convince by Arjan Karssen & Bernard Otte

Film Reference
- Art 21
- Craft in America
- Our City Dreams

Supplies (to be discussed per week, no need to purchase all at once)
- Sketchbook/notebook
- Soldering iron
- solder/flux
- brass rod and tubes
- Various building supplies per project will include paper, foam core, Bristol board, matte board, plexi, etc.

Grading Criteria and Assessment of Assignments
Work in class will be ‘hands on’, project based work. All projects will be graded using a point system. Assigned readings will be expected to be completed for the following class session.
No late assignments, projects, exams, papers, or exercises shall be accepted unless advance extensions have been arranged between the student and the teacher or unless exceptional circumstances occur. Grades will be lowered by at least one letter grade if they are not turned in by the assigned deadline.

If your work in class is unsatisfactory, you will be warned about your grade when midterm grades are due. I am available to discuss your progress in class. I encourage you to make an appointment to meet with me at least once during the semester.

The final course grade is based on the following scale:
A=100-94; A-=93-90
B+=89-86; B=85-84; B-=83-80
C+=79-76; C=75-74; C-=73-70
D=69-70; F=59 or below.

Point values are assigned to individual projects/assignments. Final grades will be based on points accumulated (90% of final grade) as well as class participation and attendance (10% of final grade). There shall be no unexcused absences.

**Grading Scale for SDA:** A indicates work of excellent quality; B of good quality; C of average quality; D of below average quality; and F indicates inadequate work.

**Assignments/Quizzes**
- Paper Pleating 10pts
- Materials & Fabric Quiz 50pts
- Photoshop File 10pts
- Rhino 3d Tutorials 25pts
- Birdhaus 3.0 Design 100pts
  - Part 1 Prelim Design, Research, 3d Model (Rhino)
  - Part 2 full size, physical model
  - Part 3 Presentation
- Soldering Tutorials 20pts
  - 2 (10 pts each)
- Soldering Project (Final) 50pts

**Final Examination Date:**
*Thursday, May 5, 2-4pm*

**Assignment Submission Policy**
Assignments will be brought to class and turned in to the instructor during class sessions. For assignments that are digital files, the student should email the instructor the file(s). Files names should have the following format: MM_project name_student name_01

**Additional Policies**
Cell phones must be turned off and put away during classes. Please take notes on paper or laptops/tablets.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Activity</th>
<th>Read/Assign</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan. 14</td>
<td>Show &amp; Tell, Course Intro, Paper Pleating exercise</td>
<td>Read: Gilette p.209-221, 479-486 Folding Paper Techniques Ch.1,</td>
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<tr>
<td>2</td>
<td>Jan. 21</td>
<td>Materials 101 – Fundamentals of Wood, Plastic, Metal and Fabric, Digital printing, CNC cutting</td>
<td>Due: Special Pleat Read: Art of Manipulating Fabric (Blackboard)</td>
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<td>3</td>
<td>Jan. 28</td>
<td>Fabric 101 seminar: Jeff Flowers from Rosebrand, curtain finishes, curtain types</td>
<td>Read: Theatrical Fabric article (blackboard)</td>
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<td>4</td>
<td>Feb. 4</td>
<td>QUIZ/ONLINE class Online quiz and materials quiz in shop</td>
<td>Assign: Digital Design Process article (blackboard) Karssen/Otte Ch. 4 &amp; 5</td>
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<td>5</td>
<td>Feb. 11</td>
<td>Lecture: Digital Fabrication Techniques &amp; Scale models Rhino walk thru if time allows</td>
<td>Assign: Rhino tutorials 1 &amp; 2 Read: Ch. 16 in Woodbridge text</td>
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<td>6</td>
<td>Feb. 18</td>
<td>RIGGING WORKSHOP WITH PETER VEAL, CREATIVE CONNERS, INC. Assign: Individual mtgs, finish tutorials &amp; Begin 3d model of birdhouse design</td>
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<td>7</td>
<td>Feb. 25</td>
<td>FIELD TRIP TO GEFFEN PLAYHOUSE Tech rehearsal for Sex With Strangers</td>
<td>Due: Progress check – upload birdhouse files to Google Drive</td>
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<td>8</td>
<td>March 3</td>
<td>MEET IN BING DESIGN LAB Demo application of texture on model/ Export orthographic drawings from Rhino to CAD, demo for physical 1:1 model</td>
<td>Due: 3d Model of Birdhaus design Assign: Build 1:1 Physical model</td>
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<td>9</td>
<td>March 10</td>
<td>MEET IN BING DESIGN LAB Due: Scale Model &amp; Birdhouse Design presentation</td>
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<td>10</td>
<td>March 17</td>
<td>NO Class – Spring Break Read: Casting, Chapter 3 in ModelMaking</td>
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<td>11</td>
<td>March 24</td>
<td>MEET IN BING DESIGN LAB PICK Birdhouse winner, Demo and Prep files for CNC milling, Photoshop Demo Read: <a href="http://layersmagazine.com/large-format-printing.html">http://layersmagazine.com/large-format-printing.html</a></td>
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<td>12</td>
<td>March 31</td>
<td>Guest lecture/workshop Due: Photoshop files, uploaded to Google Drive.</td>
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<td>13</td>
<td>April 7</td>
<td>CNC project – cut and build one of the birdhouses with Mike! MEET IN SCENE SHOP</td>
<td>Due: File prep Read: Model Making Ch.4 &amp; 5 Working With Metals/Modelling</td>
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<td>14</td>
<td>April 14</td>
<td>Soldering Basics in scene shop MEET IN SCENE SHOP Assign: Design for final project Read: How’s and Why’s of Soldering article (blackboard)</td>
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<td>15</td>
<td>April 21</td>
<td>Soldering for sound/lighting applications Location TBA Schedule Individual meetings about final design projects.</td>
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<td>16</td>
<td>April 28</td>
<td>Soldering work. MEET IN SCENE SHOP Due: Design for final project</td>
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<td>17</td>
<td>May 5</td>
<td>FINAL EXAM May 5 2pm Present Final Project MEET IN KAP Due: Final Soldering Project</td>
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WEEKLY SCHEDULE SUBJECT TO CHANGE
Statement for Students with Disabilities
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. Website and contact information for DSP: http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html, (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX) ability@usc.edu.

Statement on Academic Integrity
USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles. SCampus, the Student Guidebook, (www.usc.edu/scampus or http://scampus.usc.edu) contains the University Student Conduct Code (see University Governance, Section 11.00), while the recommended sanctions are located in Appendix A.

Emergency Preparedness/Course Continuity in a Crisis
In case of a declared emergency if travel to campus is not feasible, USC executive leadership will announce an electronic way for instructors to teach students in their residence halls or homes using a combination of Blackboard, teleconferencing, and other technologies.