Course Coordinators

1st half  Prof. Brian Rex  http://www.arch.ttu.edu/people/faculty/rex_b/
2nd half  Prof. Kuhn Park  http://www.arch.ttu.edu/people/faculty/kuhnpark/

Section Assistant

090  Michael Cox  michael.cox@ttu.edu  MW 0900-1050
Office Hours:  RM 508 (Visualization Lab)  MW 1100-1200

Course Information

3341. Digital Media II (3:2:2). Prerequisite: ARCH 1353. The use of 3-D computer graphics and modeling or design development with an emphasis on multimedia design presentations. Credits: 3 semester credit hours

Course Description

The course is designed to develop a spatial knowledge of structural systems and building construction via a comprehensive and sophisticated ability to model tectonic conditions in solid and parametric modeling technologies. The course is designed as a bridge or combination of two streams of learning in the professional curriculum: the building technology and media / representation sequences of courses. It is designed as the “prequel” to full immersion into the emerging world of Building Information Technologies (BIT) and Building Information Modeling (BIM) in subsequent semesters of studio and technology coursework.

Expected Learning Outcomes

On completion of this course, the matriculating student should:

- have a conceptual understanding of solid and parametric modeling conditions and their impact on architectural design and production
- be able to create and modify spatial representations of building construction systems in digital modeling applications
- be able to manage, manipulate, and coordinate complex and detailed digital models of buildings through parametric modeling software
- be facile in moving data and file sets back and forth through a set of solid and parametric modeling applications
Course Structure

The course is designed to work both as the adjunct course directly associated with Studio 6 (arch3501) and as a stand-alone course. Each section of arch3341 will have a roster identical to a concurrent Studio 6 (arch3501) studio section. Some sections of this course will work in direct coordination with their associated studio section. Some sections will work from a curriculum that is separate from their associated studio sections. The level of association with the studio is determined by the studio instructor. Guided by the coordinators, the section assistants will be responsible for every in-class aspect of their particular section of this course—from taking attendance, to assignment delivery, to assessment. A typical class day will include anything from a modeling demonstration by the section assistant, a discussion of an assigned reading, a visit to a construction site, and a review of completed work. Each section will meet nominally for two hours each week at designated times. The section assistant will have two hours a week of regular office hours for students in their section. A student with a median skill and acumen level should require 9 hours of study a week outside class to successfully matriculate through the coursework.

Methods of Assessment

The class is divided cleanly in half with a stand-alone grade for each half of the course. At mid-term 50% of the course grade will be delivered. At semester’s end, a 50% grade will be delivered. The semester grade will be recorded as the sum of these two halves. Assessment is divided between project grades and exams. The class will be primarily made up of four additive and incremental projects but will also include a significant number of readings and discussions of the conceptual foundations of the technologies of building construction and representation employed. The assessment method will be two part:

- Each project is weighted according to the amount of time in the semester spent executing the work. At the outset of each section of work the project’s assessment matrix will be shared with students and the parameters for assessment will be discussed in class. Daily project progress will be informally assessed through pin-ups with the attending section assistant. Project summation assessments will be delivered at the end of each project on the assessment matrix provided at the project’s outset.
- Each semester half will culminate in a written exam of the conceptual ideas and histories of the technologies presented through the course readings and discussions. The exams will be given at the class date closest to the mid-term of the semester and on the individual section’s final exam date at semester’s end.

Once grades are delivered any student disputing a grade will deliver a written explanation of their dispute to the attending section assistant and coordinator for review and reconsideration. The coordinator will reply in writing with any necessary clarification or change to the section assistant’s assessment.
Required Materials

Individual sections will use different modeling software and those expectations will be shared with the sections by each section assistant at the semester’s outset. In addition to the solid modeling and parametric modeling applications required, every student will be expected to have easy access to the Adobe Creative Suite 3 (Illustrator, Photoshop, InDesign, and Acrobat) and daily access to a digital camera. There will be no required text. Short articles and guides will be delivered through the class website in pdf format.

Retention of Student Work

The College of Architecture reserves the right to retain, exhibit, and reproduce work submitted by students. Work submitted for grade is the property of the college and remains as such until it is returned to the student.

Policies and Procedures

See the arch3341 website at: http://ttuarch3341f08.blogspot.com/ for links concerning Students with Disabilities and various academic regulations published in the TTU undergraduate and graduate catalog including: dropping a course, class attendance, reporting illness, absence due to religious observance, academic integrity, civility in the classroom, and grading practices.

Civility in the Classroom

Students are expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in the class, students are prohibited from engaging in any form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to immediately leave the classroom and an absence. See links at: http://ttuarch3341f08.blogspot.com

Class Attendance

Attendance will be taken every class meeting. Students are responsible for attending all scheduled class meetings for the full class period. A total of four absences is considered excessive, requiring the student to drop the class or receive an F for the course in compliance with drop deadlines. All absences are considered unexcused except due to religious observances and officially approved field trips, of which I must be notified at least 5 days in advance.
Criteria for Grading

The following criteria will be considered when evaluating the projects:

- Strength of process
- Consistent articulation and development of models
- Technical competency, clarity, craft and timely completeness of the work submitted
- Verbal critical performance during class meetings
- Passion, commitment, dedication and work ethic

Grading Scale

Letter grade definitions are as follows:

A: Excellent  
exceptional performance; strongly exceeding the requirements of the course, showing strong academic initiative and independent resourcefulness.

B: Good  
performance above the norm; accurate, complete, and beyond the minimum requirements of the course; work demonstrates marked progress and initiative.

C: Average  
satisfactory/adequate work; adequately meets minimum requirements and demonstrates satisfactory comprehension, communication skills, and effort; demonstrates little initiative to investigate the problem without substantial prodding of the instructor; work shows little improvement.

D: Inferior  
unsatisfactory/ inferior work; unsatisfactorily meets minimum requirements and demonstrates minimum comprehension, communication skills, and effort, at an inferior level; initiative lacking; improvement not noticeable.

F: Failing  
does not meet minimum requirements; fails to adequately demonstrate comprehension, communication skills, and effort.

Grading Distribution

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<thead>
<tr>
<th>Phase</th>
<th>Description</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>First Phase</td>
<td>Modeling Assigned Precedents / Pavilions</td>
<td>30%</td>
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<tr>
<td>Second Phase</td>
<td>Aquatic Center and Project Modeling</td>
<td>30%</td>
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<tr>
<td>Third Phase</td>
<td>Steel Construction Catalog</td>
<td>30%</td>
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<tr>
<td></td>
<td>Daily Assignments</td>
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