AD 112: Communication in Art + Design: Digital Media
Spring 2023

Section 002: Tuesday & Thursday 8:30am - 11:20am | Jessica Ross-Nersesian jessica.c.ross@njit.edu
Section 004: Monday & Thursday 1:00pm - 3:50pm | Monica Nelson Monica.Nelson@njit.edu
Section 006: Monday & Thursday 1:00pm - 3:50pm | Hye Jin Kum-Biocca hkbiocca@njit.edu
Section 008: Tuesday & Thursday 8:30am - 11:20am | Hye Jin Kum-Biocca hkbiocca@njit.edu
Section 012: Tuesday & Thursday 8:30am - 11:20am | Sophia Sobers Sophia.Sobers@njit.edu

Syllabus

Course Description
The course introduces students to the language and conventions of describing space, form, and order using digital media. Through a series of discrete creative exercises students will be exposed to a variety of software, processes and concepts utilized in design communication.

Course Objectives
- Provide an exposure to various 3d modeling, rendering and fabrication toolsets.
- Develop an understanding of multiple 3d modeling typologies.
- Develop a design methodology which operates at multiple scales.
- Provide an exposure to interior, industrial and digital design representation conventions.
- Develop a quality of craft with multiple digital tools.
- Develop the ability to present a design proposal graphically.
- Develop a comfort with 3d printing techniques

Class Policies
Assignments: Assignments are due at the beginning of class. Assignments that are not clearly labeled will not be accepted or graded. *Late homework will be graded down one letter grade for every class late.*

Data Backups: You are expected to keep multiple backups of all course data and to have your current project files available at all times during class time. Lost, unavailable or

inaccessible data will not be a valid reason for project extensions or Incomplete grade issuance.

Lab Policies: No food or drink is allowed in the computer lab. Lab door codes are to be kept private within the roster of enrolled students. Lab projectors and speakers are only for instructor use. You are expected to use good judgment in setting lengthy rendering tasks using lab facilities. *Failure to adhere to these policies can result in your being locked out of the labs.*

Academic Warning: Students who do not complete and submit assignments on time and to a satisfactory standard will fail the class. It is the student's responsibility to obtain missed assignments from other classmates and make up work in time for the next class.

Class Policies: Cell phones, email, music players, social networking and music streaming software should not be used during class. Usage of these devices or applications will result in your being asked to leave the class and being marked absent for that class session.

Instructor Expectations

At all classes you are expected to bring new computer models, renderings, and hand drawings (sketches) relevant to the project in progress. You are expected to work each and every day on the projects assigned. If for any reason you doubt your ability to do so you should consider whether you belong in this class.

While this course introduces and uses several software packages, you should not rely only on this course to teach them to you. Make use of all available resources to learn the software, books, online help, instructors and fellow students.

Grading

The following factors will be considered when assigning your grade:

Ability to intellectually engage the material investigated in the course.
Students are to thoughtfully engage the material presented in readings, presentations and discussions. Responses to questions should be directly and thoughtful related to topics investigated in the assignment.

Communication.
The ability to communicate ideas and concepts to others. This includes written, verbal, and visual communication skills. Outside critics may be brought in at the end of each project to review your work in an open forum environment. These presentations should be considered “client presentations” and should be presented with a level of professionalism consistent with your work.

Independent thinking.
Independent thinking will be evaluated and will be based on the ideas and thoughts developed on an independent basis by the student. Depth of creative thought is primary to the independent thinking evaluation. Independent thinking must be clearly demonstrated in all aspects of the course including verbal participation in the classroom.

Professional Attitude.
Students are to express and articulate clearly their view toward the topics in this course in a method which reflects the quality of a professional in the field of design. It is the ethical responsibility of the student to support the learning community in this course in a positive and constructive manner. Maintaining a positive learning community is parallel to expectations one will experience in supporting a positive work environment after graduation.

Professional attitude includes, but is not limited to, the ability to maintain and contribute to a positive learning environment, professional attitude towards classmates, guests, and the instructor. To receive a positive evaluation, professional attitude must be clearly demonstrated on a consistent and daily basis. Do not take this portion of the course for granted--you are expected to demonstrate professional maturation processes within the course. The ability to receive and give critical feedback, respond to challenging situations with a positive attitude, and support an excellent working studio environment are all essential to receiving high marks in professional attitude evaluations.

The grade breakdown for this course is as follows:

15% Class Participation
25% Minor Assignments / Critiques
60% Projects

NJIT uses the following grades:

A/4.0 (superior)
B+/3.5 (excellent)
B/3.0 (very good)
C+/2.5 (good)
C/2.0 (acceptable)
D/1.0 (minimum)
F/0.0 (inadequate)

Kepler

Project grading is not officially applied to student standing until project deliverables have been uploaded in the proper format to the Kepler system. **Failure to upload work to Kepler will result in an F for the course.**

Attendance Policy, Accommodations For Students With Disabilities

Students with either freshman or sophomore standing also have an attendance requirement overlaid on the grading criteria. No more than three unexcused absences are permitted without a grade reduction. Each unexcused absence above the three (starting with the fourth) will result in a letter grade reduction for the semester. In other words, four absences would result in a maximum grade of B (assuming everything done is of "A" quality), five absences would result in a maximum grade of "C", six in a maximum grade of "D", etc. Students do NOT receive extensions for submission of work due to any unexcused absences. Acceptance of late work is at the discretion of the individual instructor. Absences for illness in order to be excused MUST be accompanied by documentation from professional medical personnel who are NOT members of your family. Since religious holidays are known in advance, students who expect to be absent due to religious holidays must notify their instructor by the second week of class.

NJIT and instructors will endeavor to make any accommodations required and necessary for the success of students with disabilities. However, in order to receive accommodations, disabilities MUST be documented with the NJIT Disability Office AND notification of request for accommodation must be made to the instructor by the second week of class. No accommodations can be granted "after the fact" unless due to a situation (injury/illness/etc.) that occurs or is documented during the semester. In those instances accommodations will commence upon notification or observation of the disability.

Weekly Outline

Week	Topics	Assignments
Week 1 Jan 17 - Jan 22	Introduction to Course Introduction to 3D Modeling, Workflow, and Software Pre-Production Techniques and Methods 3D Modeling Concepts and Terminology	**Assignment 01: Narrate** Minor Assignment: Pre-Production
Week 2 Jan 23 - Jan 29	Presenting and Critiquing Download Software Topologies Introduction to 3DS Max/Maya	**Minor Assignment: Pre-Production Due** Assignment 01 progress and critiques
Week 3 Jan 30 - Feb 5	Modeling using Polygonal Software Hierarchy / Inheritance Box Modeling Scene Organization	Minor Assignment: Box Modeling
Week 4 Feb 6 - Feb 12	Lighting Rendering	Minor Assignment: Lighting and Rendering Minor Assignment: Texturing **Mid Review of Assignment 01: Narrate**
Week 5 Feb 13 - 19	Review Texturing	Minor Assignment: Texturing
Week 6 Feb 20 - Feb 26	Compositing in Photoshop Demo Review Presentation and Critiques	Minor Assignment: Compositing
Week 7 Feb 27 - Mar 5	Review materials as needed Class work session Desk Critiques as needed	**Assignment 01: Narrate Presentations** **Assign and go over Assignment 02: Inform**

		and Assignment 03: Evoke
Week 8 Mar 6 - Mar 12	Solidworks: NURBS Modeling (lecture) Introduction to Solidworks Understanding Parts, Drawings, and Assemblies (Pluralsight Lecture) Creating Parts Using Dimensions Creating Views (Pluralsight Lecture)	Solidworks: **Assignment 02: Inform** **Minor Assignment: Pre-Production** Minor Assignment: Solidworks Drawing Exercise
	Revit: Introduction to Autodesk Revit (lecture) Revit UI Modeling in Revit (Pluralsight Lecture) Architectural Drawings Introduction to Enscape	Revit: **Assignment 03: Evoke** **Minor Assignment: Pre-Production** Minor Assignment: Recreate a space
Week 9 - Spring Recess Mar 13 - Mar 18		
Week 10 Mar 20 - Mar 26	Solidworks: Adding Materials Mates Creating an Assembly Advanced Modeling (Pluralsight Lecture)	Solidworks: Minor Assignment: Pre-Production Due In-class pluralsight assignments
	Revit: Lighting in Revit Materials and Assets in Enscape (Pluralsight Lecture) Rendering in Enscape Introduction to Revit Sheets (Pluralsight Lecture)	Revit: Minor Assignment: Pre-Production Due In-class pluralsight assignments
Week 11 Mar 27 - Apr 2	Review materials as needed Class work session	**Assignment 02 and 03 Mid Review**

	Desk Critiques as needed	
Week 12 Apr 3 - Apr 9	Solidworks: Introduction to Animation in Solidworks (Pluralsight Lecture) Introduction to Compositing in After Effects	Solidworks: In-class pluralsight assignments
	Revit: Introduction to Animating in Enscape Interactive Experiences within Enscape (VR, Web Standalones, Panoramas) Introduction to Compositing in After Effects	Revit: In-class pluralsight assignments
Week 13 Apr 10 - Apr 16	Review materials as needed Class work session Desk Critiques as needed	
Week 14 Apr 17 - Apr 23	Review materials as needed Class work session Desk Critiques as needed	**Assignment 02 and 03 Presentations**
Week 15 Apr 24 - Apr 30	TBA	Competition
Week 16 May 1 - May 2	TBA	Competition