

IDM2

Introduction to Digital Media 2

Carnegie Mellon University
School of Architecture
Spring 2011

Course Information

Instructor: Jeremy Ficca jficca@cmu.edu
Office hours: M/F 11:30-12:30 MMCH 201 (by appointment)

Teaching Assistants: Madeline Gannon mgannon@cmu.edu
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Times and Locations:

Lecture: Monday 10:30-11:20 | MM 103
Lab A: Wednesday 10:30-11:50 | HL CLSTR
Lab B: Friday 10:30-11:50 | HL CLSTR

Help Sessions: TBA

ONLINE:

<http://www.andrew.cmu.edu/course/48-125>

Overview

Software and hardware have been used in the design disciplines for quite some time, initially as instruments of efficiency and representation and subsequently as design and production tools. As design and fabrication processes become increasingly reliant upon evermore-sophisticated tools, a designers process vacillates between virtual simulation and physical reality; two-dimensional material limits and three-dimensional constructed form. As a result, the designer of today and tomorrow must be capable of understanding the various forms of translation facilitating these shifts and the potential to significantly alter the design process resultant built form.

This is the second component in the digital media introductory course sequence within the School of Architecture. The course content and projects build upon the lessons of last semester and are principally focused on the various forms of translation between 2d and 3d as well as virtual and physical models.

Course Objectives

Impart students with a repertoire of digital design techniques and the critical thinking skills to better leverage the design potential of digital media throughout their education.

Students enrolled in this course will:

- 1: apply various digital and analog tools in the context of design problems
- 2: understand and apply basic concepts of digital fabrication
- 3: understand the relationships between two and three-dimensional geometry in digital modeling software
- 4: apply laser cutting to produce physical objects from virtual models
- 5: understand methods to construct three-dimensional form from planar material, facilitated through digital fabrication
- 6: apply advanced rendering tools to produce realistic architectural simulations including natural and artificial light
- 7: apply time-based modeling software to generate design iterations

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Expectations

This course is NOT strictly skills based. While techniques will be addressed through the lab sessions, bias will be placed on developing critical thinking skills that transcend a particular software application and promote a deep engagement of digital media and its relationship to architecture and design. Students will be expected to further explore the material addressed in class through weekly readings.

The assignments for this course are independent from studio until spring break, after which both courses will be tightly integrated. Weekly lectures will provide an introduction to the material subsequently addressed in the lab sessions. The lectures provide a contemporary context for the utilization of digital media related to the processes of design and making.

Additional material will be posted on the website and/or distributed in class on an as needed basis.

Readings

There is a reading list that accompanies the weekly lectures. I will often reference the readings and work contained within. You are strongly encouraged to familiarize yourself with the readings and the associated projects as most are significant to the topics at hand and the discipline in general. A written response to each reading will count as extra credit towards your final grade. See 'extra credit' for additional information.

Course Organization

IDM2 has two distinct components:

- 1: Lectures** - Introduction to underlying concepts, theories and practices
- 2: Labs** - Immersive instruction, case study examples

Operating Procedures

Attendance

Due to the nature of course instruction, attendance and on time arrival to BOTH the lecture and lab is critical and required. Attendance will be logged at the beginning of each course. You are allowed 1 un-excused absence, **each absence there after results in a 5-point deduction from your total grade**. Logging attendance for absent students is strictly forbidden. All students involved will receive a half grade deduction from their total grade.

Distractions

Use of Cell Phones, Pagers and all other communication devices is strictly prohibited during class time. **STUDENTS USING ANY FORM OF CHAT OR PEER-TO-PEER SOFTWARE WILL BE ASKED TO LEAVE CLASS.**

Assignment completion

Each assignment must be uploaded to blackboard and viewable by the time specified. **Late assignments are not accepted and receive a grade of 0.**

Sickness and emergencies

Please contact me if you must miss class for sickness or other another emergency. This will enable us to discuss the duration of missed classes and plan as best to prevent you from falling behind.

Disabilities

Students with disabilities should contact me to schedule a meeting to discuss academic accommodations. Please be prepared to provide the university accommodation letter.

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Evaluation and Grading

A – R grading convention is used in this course. All grades are earned!

- A** Highly advanced technical and design skills clearly evident through consistently rigorous work. Proven experimentation with various media. All assignments completed on time.
- B** Above average technical and design skills. Marked development in design and technical skills over the course of the semester. Potentially 1 missed assignment.
- C** Produces average work that fulfills the bare requirements of each assignment. Potentially 2 missed assignments.
- D** Assignments lack the depth of understanding for the issues at hand. Work is insufficient and incomplete. Potentially 3 missed assignments.
- R** Requirements of course not met. Missing more than 3 assignments.

Project weighting

15%	project 1
10%	project 2
20%	project 3
20%	project 4
15%	project 5 – studio coordinated
20%	Project 6 – studio coordinated

Extra credit

- 5 points A thoughtful half page typed response to **all five** of the assigned readings will result in the addition of 5 points to your final grade. I am not interested in a synopsis, but rather YOUR reaction/reflection to/of the readings.