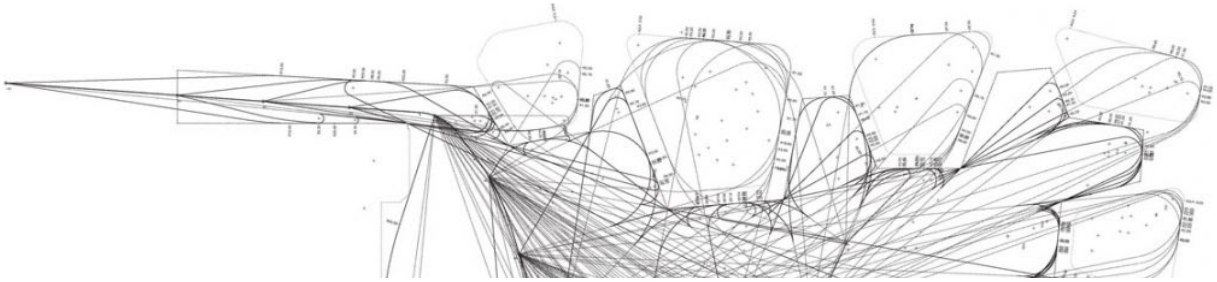

Cero 9 - Fundación Giner De Los Ríos Por Amid

ARCH 113
Visual & Digital Media
Winter 2019
Fridays Lecture/Tutorial 9:30am - 12:30pm, Lab 1:30pm - 5:20pm
E Classroom Rm 1101

Instructor:
Cam Parkin
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Support provided during lab hours
Appointments upon request

Teaching Assistants:
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TA support available during lab hours

Course Description:
The course is structured as an introduction to digital representation techniques for the purpose of visually developing and communicating spatial ideas and architectural design concepts. Students will engage in the use of the computer, specifically through a series of applications, intended to be added to their already existing representational toolkit. Rhinoceros 3D will be the primary software used for Computer Aided Drafting/Modeling (CAD), with V-Ray being used for rendering. Adobe Creative Suite will serve as the graphic applications in the workflow.

As you have learned in your first semester, the practice of drawing and model making are central to the architectural practise. This being said, there has been a massive shift towards digital tools in architecture, to the point of ubiquity. In this new digital realm, there are nearly infinite softwares and workflows the can offer efficiency, and expand creative boundaries However, with each opportunity presented by digital tools, a pitfall is also opened. While a 3D model can be an invaluable tool to quickly develop formal relationships in your building, getting absorbed in the in minutia of a digital model can be distracting and crippling. While the ability to produce photo-realistic renders can be a convincing method to communicate a project, it can ignore the architect's ability to establish visual hierarchy and evoke specific atmospheres.

This course looks at the practise of digitally drawing, modeling, and rendering, and equips students with the ability to navigate and utilize digital tools in nimble, efficient, and productive manner. Thus, the course seeks to not only equip students with technical skills, but with criticality and insight on the use of these tools in their work.

Throughout this course, two goals of digital representation will be explored: inquiry, and communication. Inquiry refers to using drawings and models for oneself to test, learn, understand, and reveal, while communication refers to expressing established architectural motives and subtleties to someone else. These are by no means separate approaches, but both are key to consider in the practise of drawing.

Grant Beaumont- La Hop Drying House

Objectives:

Incremental Objectives:

- Translate knowledge gained in Visual communication 1 to a digital workflow
- Gather, evaluate, and utilize precedents to build toolkit of visual representation techniques
- Develop novel methods of representation that foster a specific understanding of an authored project

Overall Objectives:

- To build a familiarity/aptitude with the applications in this course
- To learn the fundamentals of 2D/3D CAD (drawing, modeling, and rendering)
- To expand on the fundamentals of digital graphics (raster and vector)
- To build an adeptness and critical intuition when working with digital design applications
- To establish habits for successful, iterative and fluid digital workflows and collaboration
- To learn how to learn! This course will improve your capacity to understand and apply whatever software you my encounter later.

Structure:

The course will be comprised of three sections. Each day will include a lecture, a tutorial, and a lab. In general, the lecture will introduce the theme of the day, the tutorial will share technical skills, and the lab will give time to complete the day's assignment with instructor and TA support. Depending on the day's topic, these sections may be weighted differently, but the general scheme is below:

Lectures (.5 - 1 hr):

Lectures will be based on major topics in digital creation, representation, and fabrication.
Appropriate examples and case studies will be brought into the class; dissected from a digital perspective, from which lessons learned based on approach, technique, and product will be collectively discussed. It is through the lecture that the goal and tone of the lab will be established.

Tutorials (1 - 2 hr):

The tutorial section will see the class split into smaller groups where specific software will be taught. This will involve an instructor or TA orienting the group in a specific software and walking them through a simple process that illustrates the ability of the software in relation to the day's theme. The tutorial will equip students with the tools they need to complete their assignment during lab time. Basic questions can be addressed during tutorials, but more specific and advanced questions should be saved for the lab time.

Labs (~ 4 hr):

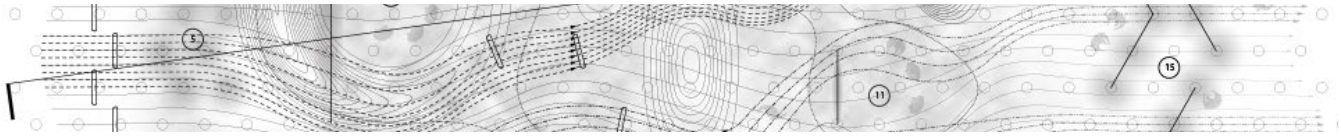
Labs will take the afternoon and give students a chance to work on their assignments with the support of the teaching team. Students are welcome to work in the e-classroom, 1127, or studio, but are expected to be present and engaged for the whole lab.

Assignments:

The assignments for this course will be daily exercises, which will be completed during lab time. Each assignment will be tailored to allow practise and experimentation for the given tool, process, or concept. Assignments will purposely be challenging to quickly advance the understanding of the software. Because the assignments have very limited time frames for competition, they will take the form of a work log that illustrates the progress made in that lab. The assignments will be submitted at the end of each Friday, so that the weekend is reserved for studio work. It is expected that these assignments will serve as springboards for more detailed and refined digital outputs completed in studio. The lab assignments should be seen as a chance to get your bearings, experiment, and test ideas, before taking your newfound knowledge to studio.

Beyond these assignments students will be graded on participation, and a final project which will be a submission of graphics created for another class' year end project.

Daily assignments will be completed in groups to give everyone a chance to collaborate and learn from each other. This will also simulate a work environment, where your digital workflows need to accessible to others. To ensure group members are carrying their load, individual contributions will be labeled in each assignment.



Sean Lally

Assignment 1 -10: 7.5% each (75% total)
Daily exercises

Final Project: 20%
Drawing set generated for another course final (TBD)

Participation: 5%
Attendance and engagement during tutorials and labs

Evaluation:
- Completion of the deliverables
- Organization and clarity of the submission
- Demonstration of the techniques covered in the tutorials
- Consideration of the themes covered in the lecture
- Independent inquiry, exploration and development

Recommended Readings and Resources:
Readings and resources will be presented in lectures for further investigation by students

Required Software:
Rhinoceros 3D (Windows)
V Ray 3 for Rhinoceros 3D (Windows only)
Adobe Creative Suite (Photoshop, Illustrator, InDesign,Acrobat Pro)

Submissions:
All submissions will be digital on Learn. Each submission should be a single compiled PDF under 25 MB.

Late Submissions:
No late submissions will be accepted. Due to the nature of the assignments, you are expected to be able to organize and submit your in-progress work on time.

Advice:

Be Patient and Considerate. Whether with other students, schoolmates, or even teaching assistants, please be mindful of the obligations, and concerns of others. Everyone wishes to perform well and it can be possible – and not at the expense of others.

Always back up your work. Make it a habit to save your work every half hour if possible (on more than one type of media).

Always work from the hard drive. Working off a USB, temporary servers, or remote disk space is unstable at best and is often the cause of a program crashing.

Obey the rules as outlined by the ACM Staff. Failure to adhere to the rules may result in suspension of computer lab facilities. Food and drink in the area may lead to accidents that may damage university equipment or prompt data loss. Any reports by ACM staff of offenders will result in 5% deduction from final term marks. Evidence of multiple offenders may also result in the barring of the class altogether from computer lab privileges.

Pirated software is not acceptable. Not only is using cracked or pirated software illegal, it is also grounds for failure in the course according to university policy. In addition to this, pirated software fails to have some functions of the legitimate versions or even worse, have incompatibility issues. Projects exhibiting signs of piracy shall be dealt with accordingly.

Perry Kulper - Fast Twitch, Speculative Desert Dwelling, v.03, Site Drawing

Plagiarism is against university policy. As with the pirated software rule, intellectual property theft is quickly becoming prevalent in the electronic age. There shall be instance where material generated by students shall be available to classmates, but realize that you may NOT submit someone else's work as your own. All assets (images, models, texture maps, etc.) Should be credited, given user permissions, or are authored by the student in question. Please refer to the Undergraduate Calendar's Academic Discipline section for guidelines on crediting and plagiarism.

Be PREPARED and EQUIPPED. Though not mandatory it is helpful to have a few items ready for class and the production of assignments and projects. Hardware should include: a mouse and a USB hard-drive (that can handle file transfers of projects and back-ups). Students should also set aside finances for printing, plotting, and fabricating.

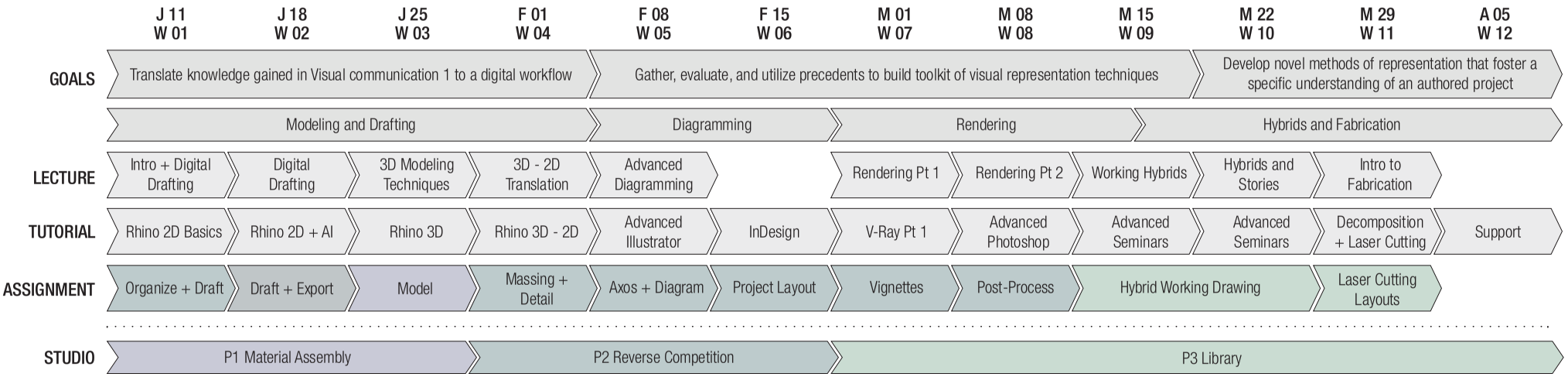
Academic integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. [Check the Office of Academic Integrity for more information.]

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4. When in doubt, please be certain to contact the department's administrative assistant who will provide further assistance.

Discipline: A student is expected to know what constitutes academic integrity to avoid committing an academic offence, and to take responsibility for his/her actions. [Check the Office of Academic Integrity for more information.] A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/ collaboration should seek guidance from the course instructor, academic advisor, or the undergraduate associate dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties, check Guidelines for the Assessment of Penalties.

Appeals: A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for students with disabilities: AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.



*Note: Daily course content is subject to change