Course Title: Rendering | Real Fakes n' Fake Reels

Course Number	EVDS 697.96		
Pre/Co-Requisites	n/a		
Instructor Name	Dan Hapton	Instructor Email	daniel.hapton@ucalgary.ca
Office Location			
Class Dates	Oct 21-25 MoTuWeFr		
Class Times	9:00AM – 1:00PM		
Class Location	PF 2160		

Course Information / Description of the Course

Rendering in architecture has evolved radically since the digital turn nearly 30 years ago. The former inaccessibility of ray-tracing software and computational horsepower combined with market forces, has produced a vernacular of slick-shiny and euphoric architectural images. These *renderings*, now commonly produced by outside consultants operating in a territory of extra-architectural expertise and catering to the interests of land developers, have essentially co-opted a traditional service and technique right out from under us. Most publicly available architectural renderings today, even those produced by architects, are highly mediated forms of commercial propaganda.

Real Fakes n' Fake Reels proposes to reclaim rendering as a disciplinary technique by taking advantage of recent advances in software and computation. Photo-realistic renderings that once required the power of overseas datacenters, can now be produced with relative ease on our laptops. Animations that would have been computationally untenable only 2 years ago, can now be rendered in near real-time. By introducing advanced, and accessible, software tools for physically-based-rendering (PBR) to architectural students and professionals, it is hoped that an increase in mastery and expertise in rendering will re-enable us to use it as an imminent tool in our practices.

Learning Resources

Required readings, textbooks and learning materials:

A capable laptop/computer with Rhino 6, Blender 2.8, and Substance Designer Installed.

Technology requirements (D2L etc.): D2L

Course Learning Outcomes

At the end of this course, students will:

1. Have a basic understanding of modeling and rendering in Blender 2.8, and know how to work between this software and Rhino 6.
2. Have a basic understanding of PBR materials and workflows.
3. Be able to produce a carefully choreographed photo-realistic rendering.
4. Be able to produce a basic animation using real-time rendering

Assessment Components

Assessment Method	Description	Weight	Aligned Course Learning Outcome
Project 1	Photo-real Rendering	50%	1, 2, 3
Project 2	Animation	50%	1, 2, 4

Assessment and Evaluation Information

Attendance and Participation Expectations:
Attendance of all course meetings will be needed to complete the projects.

Guidelines for Submitting Assignments:
Projects will be presented to the group in a review at the end of course.

Final Examinations:
n/a

Expectations for Writing (https://www.ucalgary.ca/pubs/calendar/current/e-2.html):
n/a

Late Assignments:
n/a

Criteria that must be met to pass: (e.g. whether or not a passing grade on any particular component of a course is essential if the student is to pass the course as a whole)

Full participation in tutorials, and other course meetings.

Grading Scale

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	90-94.99	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	85-89.99	Very good performance
B+	3.30	3.15-3.49	80-84.99	Good performance
B	3.00	2.85-3.14	75-79.99	Satisfactory performance
B-	2.70	2.50-2.84	70-74.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	65-69.99	All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.
C	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	
D+	1.30	1.15-1.49	50-54.99	
D	1.00	0.50-1.14	45-49.99	
F	0.00	0-0.49	0-44.99	

A student who receives a "C+" or lower in any one course will be required to withdraw regardless of their grade point average (GPA) unless the program recommends otherwise. If the program permits the student to retake a failed course, the second grade will replace the initial grade in the calculation of the GPA, and both grades will appear on the transcript.

Topic Areas & Detailed Class Schedule

Course Schedule Date	Topic	Assignments/Due Dates
Oct 21-25		TBD – both projects must be completed by October 25

Media and Recording in Learning Environments

Part 1

University Calendar: https://www.ucalgary.ca/pubs/calendar/current/e-6.html

Recording of lectures (other than audio recordings that are pre-arranged as part of an authorized accommodation) is not permitted.

Students may not record any portion of a lecture, class discussion or course-related learning activity without the prior and explicit written permission of the course instructor or authorization from Student Accessibility Services. For any other use, whether by duplication, transcription, publication, sale or transfer of recordings, written approval must be obtained from the instructor for the specific use proposed. Any use other than that described above constitutes academic misconduct and may result in suspension or expulsion.

Part 2

 The instructor may use media recordings to capture the delivery of a lecture.

 The instructor will notify all students and guests in the class that the event is being recorded. If a student or guest wants to take steps to protect privacy, and does not want to be recorded, the instructor will provide the individual (s) with an alternative means of participating and asking questions (e.g., passing written notes with questions). Students cannot be penalized for choosing not to be recorded in situations where participation is part of the course. Students must be offered other ways of earning participation credit that do not involve recording.

Any video-recording would be intended to only capture the instructor and the front of the classroom. Students/other participants would not necessarily be visible on video recordings.

Special Budgetary Requirements

None.

University of Calgary Policies and Supports

ACADEMIC ACCOMMODATION

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf.

ACADEMIC MISCONDUCT

Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when: (a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work, (b) parts of the work are taken from another source without reference to the original author, (c) the whole work (e.g., an essay) is copied from another source, and/or, (d) a student submits or presents work in one course which has also been submitted in another course (although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.
For information on academic misconduct and its consequences, please see the University of Calgary Calendar at http://www.ucalgary.ca/pubs/calendar/current/k.html

COPYRIGHT LEGISLATION:

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

UNIVERSITY STUDENT APPEALS OFFICE: If a student has a concern about the course, academic matter, or a grade that they have been assigned, they must first communicate

this concern with the instructor. If the concern cannot be resolved with the instructor, the student can proceed with an academic appeal, which normally begins with the Faculty.
https://ucalgary.ca/student-appeals/

More student support and resources (e.g. safety and wellness) can be found here:
https://www.ucalgary.ca/registrar/registration/course-outlines