

# CS 315+733 – COMPUTER GRAPHICS 2025 FALL

**Territorial acknowledgement:** The University of Regina is situated on the territories of the nêhiyawak, Anihšināpēk, Dakota, Lakota, and Nakoda, and the homeland of the Métis/Michif Nation. The Regina campus is on Treaty 4 lands, and Saskatoon classes are on Treaty 6 lands.

Course Instructor: Dr. Daryl Hepting

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**Lectures:** The class will be delivered in-person Tuesdays and Thursdays,

08:30-09:45 in CL 112, September 2 until December 5 inclusive.

Website: https://urcourses.uregina.ca/course/view.php?id=37944

Office hours: Tuesdays and Thursdays 10:30am – noon. If these times don't fit your

schedule, please email me (daryl.hepting@uregina.ca) to set up an

appointment.

## **CS-315 Calendar Description:**

Introduction to graphics hardware and software. Two-dimensional graphics rendering algorithms. Basic three-dimensional modelling, transformations, viewing geometry, lighting, shading, hidden surface removal, and texture mapping.

#### **CS-733 Calendar Description:**

Techniques and software for generating computer graphics and animations. Topics include geometric and mathematical modelling, image rendering and synthesis, principles of animation, and graphics and animation frameworks.

**Textbook:** Interactive Computer Graphics, A Top-Down Approach with WebGL, 8th

edition, by Edward Angel and Dave Shreiner (online only, but earlier

editions may be available in print)

https://www.interactivecomputergraphics.com

Additional material to be posted and made available on UR Courses.

## Grading

Quizzes before Meetings 10%

Labs (CS-315) 10% \* only for CS-315 students Presentation (CS-733) 10% \* only for CS-733 students

Assignments 10%
Participation 5%
Midterm exam 15%

Final exam 50% \* you must pass the final to pass the course

Research Credit (CS-315) 2% (bonus) \*may not be available, only for CS-315 students

# **Exam modality**

The midterm and final exams will be in-person, written exams.

## Lecture syllabus

Please find details on UR Courses

# **Experiential Assignments**

This course uses assignments for the purposes of giving students an opportunity for experiential learning. A small proportion of the final grade (2%) will be applied to each assignment, as an incentive for putting effort into attempting it in a timely manner. All submitted assignments will be checked that a reasonable attempt has been made; if so, the 2% will be awarded. After the due date has passed, a solution will be posted along with a short video that explains the solution. This will allow students to self-assess their learning. A more robust assessment of student learning will be conducted on the midterm and final exams. These exams will include questions that directly reference the assignments; as such, the assignments should be treated as study mechanisms for the exams.

The assignments will not be checked to verify that students did their own work. Students may work alone on the assignments using only the textbook, course material, and their own skill and ability. Students may work together, helping each other to learn. Students may employ GenAl tools to assist with their programming and debugging, and to enhance their understanding of the topics. Whether a student works alone, with others, or with the help of GenAl tools, each student will be responsible for their own learning and understanding of the course topics. Whether this learning has been effective will be assessed individually in the exams.

## Late assignments/missed exam policy

Late assignments will be penalized by a percentage of the assigned grade. If the midterm test is missed, extra weight will be placed on the final. If you miss the final exam, you will receive an NP.

#### Attendance policy

Attendance at lectures is expected. Students can record their own attendance in UR Courses.

## **Academic integrity**

Academic integrity requires students be honest. Assignments and exams are to help students learn; grades show how fully this goal is attained. Thus, all work and grades (unless otherwise noted) should result from a student's own understanding and effort. Acts of academic misconduct violate academic integrity, and are considered serious offences by the University. Examples include, but are not limited to, cheating on tests or exams, plagiarizing, copying from others, and submitting the work of others as your own. Instances of academic misconduct will be reported to the Associate Dean in your faculty. Any use of generative AI in the completion of coursework should be cited appropriately, including the identification of any tools that were used, how the tools were employed, and how the AI-generated content was integrated into the submitted coursework.

## **Accommodations**

Students in this course who may have need for specialized accommodations, should contact the Centre for Student Accessibility (Riddell Centre 229, 585-4631), and must discuss their accommodation letter with their instructor before any accommodations will be granted.