COURSE CALENDAR DESCRIPTION

Introduces the fundamental concepts and algorithms of three-dimensional computer graphics, including object modelling, transformations, cameras, visibility and shading. Prerequisites: cumulative GPA of 4.50 or better over all major EECS courses (without digit "5"); LE/EECS 2030 3.00 or LE/EECS 1030 3.00; LE/EECS 2031 3.00, SC/MATH 1025 3.00. PRIOR TO FALL 2011: course credit exclusions: GL/CSLA 3635 3.00.

INSTRUCTOR(S)

<table>
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<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
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<tr>
<td>Faloutsos, Petros</td>
<td>Sec. A / LECT / F</td>
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ADDITIONAL INFORMATION

The purpose of this course is to provide an introduction to the fundamental principles of interactive Computer Graphics. The course will cover the following topics: Graphics pipeline, Modelling Transformations, Viewing Transformation, Projections, Polygonal representations, Parametric Curves and Surfaces, Clipping, Visibility, Texture Mapping, Rasterization, Colour Spaces, Local and Global Illumination, Raytracing. The coursework will be based on OpenGL (WebGL), Javascript and C++.

MARKING SCHEME

• Assignment 1: 15 %
• Assignment 2: 15 %
• Assignment 3: 20 %
• Midterm I: 20 %
• Final: 30 %

The course will be graded based on a curve. No more than 30% of As will be given.

REQUIRED TEXT BOOKS


RECOMMENDED TEXT BOOKS


REFERENCE TEXT BOOKS

ACADEMIC INTEGRITY LINKS
• Senate Policy on Academic Honesty - http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/
• Academic Integrity - http://lassonde.yorku.ca/academic-integrity

STUDENT LINKS
• Student Rights and Responsibilities - http://oscr.students.uit.yorku.ca/student-conduct
• Religious Observance - https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs
• Academic Accommodation for Students with Disabilities - http://secretariat-policies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/
• Counselling and Disability Services - http://cds.info.yorku.ca/
• York University’s Policies on Sexual Violence - http://secretariat-policies.info.yorku.ca/policies/sexual-violence-policy-on/
• York University’s Policies on Gender/LGBTQ*/Positive Space - http://rights.info.yorku.ca/lgbtq/

LAND ACKNOWLEDGEMENT
• We acknowledge our presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Huron-Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders, the Mississaugas of the New Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.
• The Indigenous Framework for York University: A Guide to Action can be found here: http://indigenous.info.yorku.ca/
• Meaning of a land acknowledgement: http://healthydebate.ca/opinions/indigenous-land-acknowledgements

Many courses utilize Moodle, York University’s course website system. If your course is using Moodle, click here to access it.

Moodle @ York University