BBM 412 - COMPUTER GRAPHICS

SYLLABUS

Instructor:

Asst. Prof. Ufuk Çelikcan

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office: Room 204 of the Dept. of Computer Engineering Building.

Textbook:

Interactive Computer Graphics: A Top-Down Approach with WebGL (7th Edition)

by Angel and Shreiner:

https://www.amazon.com/Interactive-Computer-Graphics-Top-Down-Approach/dp/0133574849

* You may purchase a hardcopy from Palme Kitabevi on Kızılay-Olgunlar.

Schedule:

WEEK	SUBJECT
1	INTRODUCTION, CH1 - GRAPHICS SYSTEMS AND MODELS PT1
2	CH1 - GRAPHICS SYSTEMS AND MODELS PT2
3	CH2 - PROGRAMMING WITH OPENGL PT1
4	CH2 - PROGRAMMING WITH OPENGL PT2
5	CH3 - GEOMETRIC OBJECTS AND TRANSFORMATIONS PT1
6	CH3 - GEOMETRIC OBJECTS AND TRANSFORMATIONS PT2
7	**EXAM I**
8	CH4 - VIEWING PT1
9	CH4 - VIEWING PT2
10	CH5 - LIGHTING AND SHADING
11	CH6 - FROM VERTICES TO FRAGMENTS
12	CH7 - DISCRETE TECHNIQUES PT1
13	CH7 - DISCRETE TECHNIQUES PT2
14	**EXAM II**

Grading:

Exam I (around the 7th week): 25%

Exam II (before the end of the classes): 30%

Final: Project (see details below): 40%

Attendance: 5%

Project:

- A project implemented in Javascript with WebGL is presented at the end of the term.
- You can choose to do the project individually or as a member of a project group. Project groups can have <u>as many as 3 members</u>**.**
- The finalized project is required to exhibit the knowledge of an array of subjects covered during the class.
- A brief proposal for the project is submitted by the project group around the 7th week of the class.
- Sample projects, project topics and subjects to cover will be demonstrated by the instructor during the first 6 weeks.
- The submissions for the project will be:
  - proposal document (5% OF PROJECT GRADE).
  - and a final project submission consisting of (95% OF PROJECT GRADE):
    - the entire project source code directory including source files and accessory files
    - video promo/trailer of the project
    - and the powerpoint presentation of the project.