Syllabus (1st Semester, 2025)

Couse Information

Course Code	CSE46801	Course Title	Information Visualization
Year/Semester	2025 / 1st Semester	School	Department of Computer Science and Engineering
Class Time/Classroom	FRI 16:00-17:15 (Online), FRI 17:30-18:45 (Online)	Grading Type	Letter grade

Instructor Information

Instructor	Office	Tel.	E-mail	Office Hours
Sungahn Ko 고성안				by appointment

Teaching Method

☑ Online ☐ Offline ☐ Online & Offline

Course Objectives & Description

In this course, we will focus on "designing user new interfaces "and "information visualization techniques "and systems. A fundamental skill in software engineering is to rapidly implement and evaluate efficient prototypes of an end-user application for deployment. This course will introduce foundational skills for high-fidelity graphical and visual user interface prototyping and development with state-of-the-art software interface design toolkits.

Web development tools are popular in prototyping applications, including HTML, CSS, and JavaScript with libraries (D3.js, jQuery, Django, HIghcharts, Raphael, Bootstrap, dagre, etc.). Students are encouraged to begin learning basics of JavaScript programming with libraries in advance. There is a term project of building your own web visualization system.

Grading

Attendance (%)	Midterm Exam (%)	Final Exam (%)	Quizzes (%)	Individual Assignments (%)
				30.0
Reports (%)	**Presentations (%)**	**Other (%)**	**Total (100%)**	
	20.0	50.0	100.0	

Remarks

Group Term project: 50%. Grading policy is subject to change.

Weekly Schedule

Week	Contents
01	Introduction and history of information visualization
02	Color
03	Visual Data Model
04	Graphs and Trees Visualization
05	Time Visualization
06	Text Visualization
07	Midterm exam
08	Geospatial Visualization
09	Animation
10	Multidimensional Visualization
11	Perception
12	Introduction to Visual Analytics
13	Storytelling
14	Collaboration
15	Production, Presentation

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16	Conducting Research in Visualization

Notes and Remarks

Weekly schedule and grading policy are subject to change

Textbook & Reference

Text/ Reference	Resource Type	Title	Author	Publisher	Year	Edition	ISBN/ISSN	Course Reserves Designation
Textbook	Book	Visualization Analysis and Design	Tamara Munzner	CRC Press	2014	1		Open Shelf

Remarks