

Syllabus

Search

INV6104-01 (1ST SEMESTER, 2022)



Created Date	2022-01-19 18:19:58	Last-Modified	2022-01-19 18:22:26
Course Title	DATA VISUALIZATION	Credit	3
Location	Realtime online lecture/Pre-recorded lecture	Time	Mon6,7/Mon8

Instructor	So Chaehan	Department	언더우드국제대학 융합인문사회과학부
Office		Telephone	
e-mail & Office Hour			

Target Students	<p>All students interested in the topics</p> <ul style="list-style-type: none"> - data visualization - graphics design for data/information design - get a good foundation on understanding data to prepare for the machine learning course in the winter semester
Course Description & Goals	<p>This course takes you from the basics to an expert data visualizer who can cater to top decision makers like CEOs, business analysts, strategy consultants</p> <p>Among others, you will learn</p> <ul style="list-style-type: none"> - key concepts of data visualization (data types, data structures, data encoding) - R as a powerful tool for data analysis, data manipulation, and data visualization - visualization of basic data structures (e.g. histograms, boxplots, scatterplots) - visualization of multivariate data structures (e.g. interactive charts, cartography) - pattern discovery (e.g. 3D plots, heatmaps, cluster plots) <p>This course is designed as a "soft" entry to prepare students for the machine learning course in the fall semester.</p>
Prerequisite	No prerequisite required.
Course Requirements	<p>No prior programming experience is required but a strong willingness to learn concepts of data.</p> <p>If you are a beginner to programming, please be aware that the first 4 weeks require more dedication to learn the basics.</p>
Grading Policy	<p>Absolute grading.</p> <p>50% midterm project</p> <p>50% final project</p> <p>Attendance:</p> <p>2 Lates = 1 Absence</p> <p>2 Absences = 1 Grade down</p> <p>3 Absences = Fail</p> <p>1min late = Late</p>
Texts & References	

Instructor's Profile	<p>Since 09/2019: Assistant Professor in Information & Interaction Design</p> <p>03/2016 - 08/2019: Assistant Professor of Marketing & Design Research, Hongik University Faculty Member of Graduate School of Artificial Intelligence & Big Data, Hongik University</p> <p>11/2007 - 12/2009: Ph.D. in Psychology, Humboldt University Berlin</p> <p>09/1991 - 05/1998 Master of Science in Business/Electrical Engineering, Technical University Berlin</p> <p>09/1996 - 12/1997: Master of Science in Management, Ecole Sup?rieure de Commerce de Paris (ESCP), Paris, France</p> <p>--</p> <p>Professional Experience</p> <p>2015 Design Thinking Coach</p> <p>2014 COO Online Media</p> <p>1999-2013 Consulting in IT Project Management, Agile Methodology</p>
TA's Name & Contact Information	currently looking for applications. if you are interested, please apply to cso@yonsei.ac.kr
Syllabus in English	Course material will be distributed as required in the curriculum. The curriculum can be adjusted in consideration of group performance.

Week	Period	Weekly Topic & Contents	Course Material Range & Assignments	Reference
1	2022-03-02 2022-03-08	Introduction to the course		(3.2.) Spring semester classes begin (3.4. - 3.8.) Course add and drop period
2	2022-03-09 2022-03-15	Introduction to R Basic visualization principles Basic data concepts		(3.9.) Presidential election day
3	2022-03-16 2022-03-22	Goals of data visualization Introduction to dplyr		
4	2022-03-23 2022-03-29	Data preprocessing: tidy data Basic R plots		
5	2022-03-30 2022-04-05	Create, retrieve and visualize an online survey		
6	2022-04-06 2022-04-12	Introduction to the grammar of graphics & ggplot2		(4.7.) First third of the semester ends
7	2022-04-13 2022-04-19	Professional graphics creation by iterative development		
8	2022-04-20 2022-04-26	Midterm project/exam		(4.20. - 4.26.) Midterm Examinations
9	2022-04-27 2022-05-03	Color in data visualization		(4.27. - 4.29.) Course withdrawal period (5.2. - 5.4.) Application Period for S/U evaluation
10	2022-05-04 2022-05-10	Aesthetics in data visualization		(5.2. - 5.4.) Application Period for S/U evaluation (5.5.) Children's day
11	2022-05-11 2022-05-17	Retrieve & visualize data from Google Trends		(5.16.) Second third of the semester ends
12	2022-05-18 2022-05-24	Retrieve & visualize data from Twitter		
13	2022-05-25	Retrieve & visualize data from Facebook		

	2022-05-31			
14	2022-06-01 2022-06-07	Visualize maps		(6.1.) Local election day (6.6.) Memorial day
15	2022-06-08 2022-06-14	Final project/exam		(6.1. - 6.14.) Self-study
16	2022-06-15 2022-06-21			(6.15. - 6.21.) Final Examinations

* Changes in Management of Academic Semester

During the midterm examinations (2022.10.20. - 10.26.) and final examinations (2022.12.15. - 12.21.) period, classes or self-study should be continued unless there is an exam scheduled during the week.

* According to the University regulation section 57-2, students with disabilities can request special support related to attendance, lectures, assignments, or exams by contacting the course professor at the beginning of semester. Upon request, students can receive such support from the course professor or from the Center for Students with Disabilities(OSD). The following are examples of types of support available in the lectures, assignments, and exams:

(However, actual support may vary depending on the course.)

[Lecture]

- Visual Impairment: alternative, braille, enlarged reading materials, note-taker
- Physical Impairment: alternative reading materials, access to classroom, note-taker, assigned seat
- Hearing Impairment: note-taker/stenographer, recording lecture
- Intellectual Disability/Autism: note-taker, study mentor

[Assignments and Exam]

- Visual, Physical, Hearing Impairment: extra days for submission, alternative type of assignment, extended exam time, alternative type of exam, arranging separate exam room, and proctors, note-taker
- Intellectual Disability/Autism: personalized assignments, alternative type of evaluation

