



HANYANG UNIVERSITY

Hanyang International Summer School

<https://docs.google.com/spreadsheets/d/1mWZhaCYTCEzH6cZGJHy7Xp2aVY21NKq2hrJiroBioh8>

Name	Hyoung-Goo Kang
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Home University	Hanyang University
Department	Finance department at the business school

Course Title	AI Basics
Field of Study	Business, organization, innovation, computer science, software
Credits	3
Contact Hours	45
Course Code/Number	ISS1164
Lecture Schedule	Tue-Fri / 09:00~12:00
Course Description	<p>Since an early flush of optimism in the 1950s, smaller subsets of artificial intelligence - first machine learning, then deep learning, a subset of machine learning - have created ever larger disruptions.</p> <p>The OECD defines an Artificial Intelligence (AI) System as a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual</p>

	<p>environments (https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449),</p> <p>This class introduces artificial intelligence (AI) and discusses its application to practical problems. Since AI covers machine learning and deep learning as the above figure illustrates, we will cover them as well.</p>
Course Objective	<p>This course would be easy and accessible. It intuitively explains the various computational and mathematical models to apply artificial intelligence to practical problems, such as optimization, application design, textual analysis, portfolio analytics, quantitative risk modeling, time series analysis, cross-sectional analysis, etc. Students will learn and use python for their projects. Students are expected to come up with their own ideas for their projects.</p>
Preparations (Pre-Knowledge)	<p>This course is pretty introductory.</p>
Materials (Textbook/ Materials)	<p>(1) John C Hull. Machine Learning in Business https://www-2.rotman.utoronto.ca/~hull/MLThirdEditionFiles/index3rdEd.html (2) Harvard business cases</p>

Lesson Plan: Fill out the topic for each class in detail		
Week 1	1 st Day	Orientation & Opening Ceremony
	Class 1	Class introduction
	Class 2	Ch1
	Class 3	Ch2
Week 2	Class 4	Ch3
	Class 5	Special lecture
	Class 6	Ch4
	Class 7	Ch5

Week 3	Class 8	Take home midterm exam
	Class 9	Special lecture
	Class 10	Ch8
	Class 11	Ch9
Week 4	Class 12	Case discussion
	Class 13	Take home final exam
	Class 14	Case discussion
	Class 15	Final presentation

Evaluation (%)

* Total sum of percentages should be 100%

* Only below options are available, please do not change the form (fill out the given form)

Assign-ments	Attenda- nce	Final	Group Project	Mid- term	Participa- tion	Presenta- tion	Quiz	Total
20%	10%	20%	0	20%	10%	20%	0%	100%