

KOCW Content Development Application

Applicant	Faculty	Department	Major
	Name	Dr. Preethi Ananthachari	Position Assistant Professor
	Contact		E-mail
Content	Subject	Artificial Intelligence	
	Credit	2 credits	
	Field	Liberal Arts () Social Science () Engineering (yes) Natural Science () Education () Medicine or Pharmaceutical Study () PE or Art ()	
	Outline of the Class	가. This course provides the students with a guide to developing applications using the Artificial Intelligence. It starts with the introduction to fundamental elements of learning and logical thinking. In addition, students will learn about searching, rational thinking, and the steps to train the AI system. Machine learning concepts will be introduced to implement simple classification techniques for business application. Hands-on practices figure prominently throughout this course so students can experience firsthand the power of artificial Intelligence.	
Weeks	(10) Weeks (1 credit should be more than 15 minutes of a video each week for 10 weeks.)		
<p>I submit this document for the KOCW Development Project.</p> <p style="text-align: center;">2021. 03 . 29 .</p> <p style="text-align: center;">Applicant : ____Preethi Ananthachari____ (Sign)</p> <p>Head of CTL, Woo-Song University</p>			

* Contact : Tel. 042-630-9396, 9285 / WCTL@wsu.ac.kr

KOCW Content Development

Application

1. Outline

가. Name of a Class

Class Name	Artificial Intelligence		
Semester	Second semester of 2021	Division	Major (Y) Liberal Art ()

나. Goal of a Class

(1) Goal of a Class : To provide comprehensive and indepth knowledge of AI. Understand the fundamental elements of Artificial Intelligence, terminology, and the steps required to create basic learning system. Identify business application that needs design and represent problems by presenting graph/data charts. Complete all learning activities by discussion, practical learning sessions.

(2) Introduction : Artificial Intelligence is an approach to make a machine think rationally. AI is a study of how human brain thinks when it encounters a problem, learns from experience, decides what is right and works on the correct direction, so finally it solves the problems. As a result this study outputs intelligent software systems. The aim of AI is to apply computer algorithms which are related to human knowledge, for example, logical reasoning, learning by experience, and problem-solving.

2. Weekly Plan

Week	Content(Topic)	Learning Objective	How to Operate		
			Methodology	Material	Reference
1	Artificial Intelligence Introduction	Introduction Basics of AI and history	online / Video	PPT	
2	Artificial Intelligent Agents	About the AI Program and Environments. Apply Search Methods for Problem Solving.	Online / Video	PPT	
3	Search	Acquire the understanding of the world. Use experience to apply an action. Game Playing.	Online/ Video	PPT	
4	8 Queens Problem using back tracking	Well Formed Formulas, Inference Rules.	Online /Video	PPT	
5	Uncertainty	Bayes Theorem and its applications. Making Simple Decisions.	Online /Video	PPT	
6	Bayes Theorem	Acting Logically and practical	Online /Video	PPT	

		Planning.			
7	Planners and Planning Languages	Learning from Observation, prior knowledge, available feedback.	Online/ Video	PPT	
8	Neural Networks	Machine Learning, How brain works, Perceptron, Network Structures.	Online /Video	PPT	
9	Agent that communicate	Agents that Communicate, Fundamentals of Communication, Componenets of Communication.	Online/ Video	PPT	
10	Natural Language Processing	Practical applications, Machine translation, Robotics.	Online /Video	PPT	

※ You can freely complete the content sections based on the feature of the class.

3. How are you going to use your class?

For a credit class (), For a non-credit class (), For a public view (Y)

4. Expected Outcome:

Compare AI with human intelligence and traditional information processing and discuss its strengths and limitations as well as its application to complex and human-centred problems. Indepth understanding of the core concepts and algorithms of advanced AI, including informed searching, logic, uncertain knowledge and reasoning, graph models, decision making, multiagent, natural language processing, robotics, and so on. Apply and analyze the basic principles, models, and algorithms of AI to Identify, design, and solve problems in the analysis and model of information systems.