

Tamkang University Academic Year 110, 1st Semester Course Syllabus

Course Title	INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS	Instructor	CHEN, DUEN-KAI
Course Class	TEIDB3P DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION ENGINEERING (ENGLISH-TAUGHT PROGRAM)SCIENCE AND	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester
Relevance to SDGs	INFORMATION ENGINEERING, 3P SDG4 Quality education SDG9 Industry, Innovation, and Infrastructure		
Departmental Aim of Education			
I. Comprehend professional knowledge. II. Acquire mastery of Practical Skills. III. Establish creative achievement.			
Subject Departmental core competences			
E. Professional skills for information technology (IT) industry.(ratio:100.00)			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:10.00) 2. Information literacy. (ratio:60.00) 3. A vision for the future. (ratio:10.00) 5. Independent thinking. (ratio:10.00) 7. A spirit of teamwork and dedication. (ratio:10.00)			
Course Introduction	This class aims to provide an introduction to efforts from a wide range of artificial intelligence researches, including symbolic approaches, such as Expert Systems, as well as numerical approaches, such as artificial neural networks and genetic algorithms. This course will also touch the social impact of AI.		

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.

II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.

III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

No.	Teaching Objectives	objective methods
1	Introduce efforts from a wide range of artificial intelligence researches to students.	Cognitive

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	E	12357	Lecture, Discussion	Study Assignments, Discussion(including classroom and online), Report(including oral and written), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	110/09/22 ~ 110/09/28	Overview of this course	
2	110/09/29 ~ 110/10/05	Uses and Limitations. Introduction to AI applications.	
3	110/10/06 ~ 110/10/12	Introduction to AI applications.	
4	110/10/13 ~ 110/10/19	Brief History of Artificial Intelligence	
5	110/10/20 ~ 110/10/26	Brief History of Artificial Intelligence	
6	110/10/27 ~ 110/11/02	Social impact of AI	
7	110/11/03 ~ 110/11/09	Term project proposal presentation	
8	110/11/10 ~ 110/11/16	Search Methodologies and Game Playing	
9	110/11/17 ~ 110/11/23	Midterm Exam Week	
10	110/11/24 ~ 110/11/30	Expert systems and Rule-based systems	

11	110/12/01 ~ 110/12/07	Expert systems and Rule-based systems	
12	110/12/08 ~ 110/12/14	Expert systems and Rule-based systems	
13	110/12/15 ~ 110/12/21	Introduction to Machine Learning	
14	110/12/22 ~ 110/12/28	Introduction to Machine Learning	
15	110/12/29 ~ 111/01/04	Introduction to Machine Learning	
16	111/01/05 ~ 111/01/11	Introduction to Machine Learning	
17	111/01/12 ~ 111/01/18	Term project presentation	
18	111/01/19 ~ 111/01/25		
Requirement	<p>Details of grading policy and how course project works will be announce in the first class. Lecturer remain the rights to adjust grading policy. 成績計算方式及專題執行細節將於課堂上說明，且授課教師保留調整計算方式的彈性。 If a student' s class absence reaches one-third of the total class hours (in a semester) for a particular course, the course instructor will notify the Office of Academic Affairs, and the student will not be allowed to take part in the remaining course examinations and will receive a semester grade (for that course) of zero.</p>		
Teaching Facility	Computer, Projector		
Textbooks and Teaching Materials	Artificial Intelligence Illuminated, Ben Coppin, Jones & Bartlett Publishers (March 2004), ISBN-13: 978-0763732301		
References	Artificial Intelligence: a guide to intelligent systems 2nd Edition by Michael Negnevitsky, Addison Wesley		
Number of Assignment(s)	(Filled in by assignment instructor only)		
Grading Policy	<p>◆ Attendance : % ◆ Mark of Usual : 50.0 % ◆ Midterm Exam : 10.0 % ◆ Final Exam : % ◆ Other < course project > : 40.0 %</p>		
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php .</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>		