

Tamkang University Academic Year 108, 1st Semester Course Syllabus

Course Title	INTRODUCTION TO ARTIFICIAL INTELLIGENCE AND EXPERT SYSTEMS	Instructor	CHEN, DUEN-KAI
Course Class	TQICB3A DIVISION OF SOFTWARE ENGINEERING, DEPARTMENT OF INNOVATIVE INFORMATION AND TECHNOLOGY (ENGLISH- TAUGHT PROGRAM), 3A	Details	<ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester
Departmental Aim of Education			
Cultivate professional talents in developing and applying information system in various fields.			
Subject Departmental core competences			
E. Capability of integrating information system(ratio:100.00)			
Subject Schoolwide essential virtues			
<ol style="list-style-type: none"> 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	<p>This class is aimed to provide introduction to efforts from wide range of artificial intelligence researches, including symbolic approach, such as Expert Systems, as well as numerical approach, such as artificial neural networks and genetic algorithms. This course will also touch the social impact of AI.</p>		

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	provide introduction to efforts from wide range of artificial intelligence research	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1	E	235	Lecture, Discussion, Practicum	Discussion(including classroom and online), Practicum, Report(including oral and written), Activity Participation

Course Schedule

Week	Date	Course Contents	Note
1	108/09/09 ~ 108/09/15	Overview of this course	
2	108/09/16 ~ 108/09/22	Brief History of Artificial Intelligence	
3	108/09/23 ~ 108/09/29	Brief History of Artificial Intelligence	
4	108/09/30 ~ 108/10/06	Uses and Limitations. Introduction to AI applications.	
5	108/10/07 ~ 108/10/13	Introduction to AI applications.	
6	108/10/14 ~ 108/10/20	Social impact of AI	
7	108/10/21 ~ 108/10/27	Term project proposal presentation	
8	108/10/28 ~ 108/11/03	Search Methodologies and Game Playing	
9	108/11/04 ~ 108/11/10	Search Methodologies and Game Playing	
10	108/11/11 ~ 108/11/17	Midterm Exam Week	

11	108/11/18 ~ 108/11/24	Expert systems and Rule-based systems	
12	108/11/25 ~ 108/12/01	Expert systems and Rule-based systems	
13	108/12/02 ~ 108/12/08	Expert systems and Rule-based systems	
14	108/12/09 ~ 108/12/15	Introduction to Machine Learning	
15	108/12/16 ~ 108/12/22	Introduction to Machine Learning	
16	108/12/23 ~ 108/12/29	Introduction to Machine Learning	
17	108/12/30 ~ 109/01/05	Term project presentation	
18	109/01/06 ~ 109/01/12	Final Exam Week (Date:109/1/3-109/1/9)	
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>		