

Tamkang University Academic Year 114, 1st Semester Course Syllabus

Course Title	LOGIC AND PHILOSOPHY	Instructor	YANG, CHI-HER
Course Class	TNUVB0A PHILOSOPHY AND RELIGION, 0A	Details	♦ General Course ♦ Required ♦ One Semester ♦ 2 Credits
Relevance to SDGs	SDG4 Quality education		
D e p a r t m e n t a l A i m o f E d u c a t i o n			
I . To build basic understanding of Philosophy and Religion. II. To cultivate ability of deliberation and critical thinking. III. To develop in-depth reflection on moral judgment and decision of action.			
Subject Schoolwide essential virtues			
1. A global perspective. (ratio:5.00) 2. Information literacy. (ratio:25.00) 3. A vision for the future. (ratio:5.00) 4. Moral integrity. (ratio:25.00) 5. Independent thinking. (ratio:25.00) 6. A cheerful attitude and healthy lifestyle. (ratio:5.00) 7. A spirit of teamwork and dedication. (ratio:5.00) 8. A sense of aesthetic appreciation. (ratio:5.00)			
Course Introduction	Logic provides us with a set of skills for evaluating arguments. These skills are important to students and future citizens. In this course the lecturer will introduce the elements of logic.		

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	Students will know how to evaluate arguments.	Cognitive

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

No.	Core Competences	Essential Virtues	Teaching Methods	Assessment
1		12345678	Lecture, Discussion	Testing, Study Assignments, Discussion(including classroom and online)

Course Schedule

Week	Date	Course Contents	Note
1	114/09/15 ~ 114/09/21	Introduction	
2	114/09/22 ~ 114/09/28	Valid argument	
3	114/09/29 ~ 114/10/05	Valid argument	
4	114/10/06 ~ 114/10/12	Syllogism	
5	114/10/13 ~ 114/10/19	Propositional logic: syntax	
6	114/10/20 ~ 114/10/26	Propositional logic: semantics	
7	114/10/27 ~ 114/11/02	Truth table	
8	114/11/03 ~ 114/11/09	Natural Deduction	
9	114/11/10 ~ 114/11/16	Midterm Exam/Midterm Assessment Week (teachers can adjust the week as needed)	
10	114/11/17 ~ 114/11/23	Liar paradox	
11	114/11/24 ~ 114/11/30	Russell's paradox	

12	114/12/01 ~ 114/12/07	Predicate logic: syntax	
13	114/12/08 ~ 114/12/14	Predicate logic: semantics	
14	114/12/15 ~ 114/12/21	Identity and definite description	
15	114/12/22 ~ 114/12/28	Soundness and completeness	
16	114/12/29 ~ 115/01/04	Final Week of Diverse Assessments	
17	115/01/05 ~ 115/01/11	Final Week of Diverse Assessments/Flexible Teaching Week for Teachers	
18	115/01/12 ~ 115/01/18	Flexible Teaching Week for Teachers	
Key capabilities		Problem solving	
Interdisciplinary		STEAM course (S:Science, T:Technology, E:Engineering, M:Math, A field:Integration of Art and Humanist)	
Distinctive teaching			
Course Content		Logical Thinking	
Requirement		Students should not use AI during class discussions. Instead, they should pay attention to what others say. Students are allowed to use AI for assignments, but any usage must be specified. In general, using AI is not very helpful in this course because the information it generates can be difficult for students to verify. Any use of AI for this course should be done with caution.	
Textbooks and Teaching Materials		Self-made teaching materials:Handouts Using teaching materials from other writers:Textbooks	
References		Priest, G. (2017). Logic. Oxford: Oxford University Press. 傅皓政 (2017) 。《思考的秘密》第二版。臺北：三民。 MacFarlane, J. (2021). Philosophical logic. New York: Routledge Restall, G. and Standefer, S. (2023). Logical methods. Cambridge: The MIT Press. Bjorndahl, A. (2024). An introduction to classical and modal logics. New York: Cambridge University Press.	

Grading Policy	◆ Attendance : 20.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 30.0 % ◆ Final Exam : 30.0 % ◆ Other < > : %
Note	<p>This syllabus may be uploaded at the website of Course Syllabus Management System at https://web2.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>※"Adhere to the concept of intellectual property rights" and "Do not illegally photocopy, download, or distribute." Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p>