



Course Specification

(Postgraduate)

Course Title: Ethical Issues in AI

Course Code: 502880-1

Program: Master in Artificial Intelligence

Department: Computer Science

College: Computers and Information Technology

Institution: Taif University

Version: V2

Last Revision Date: 5 May 2024

قسم علوم الحاسب



Computer Science Department

جامعة الطائف
TAIF UNIVERSITY



Table of Contents

A. General information about the course:.....	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:.....	4
C. Course Content:.....	4
D. Students Assessment Activities:.....	5
E. Learning Resources and Facilities:	5
F. Assessment of Course Quality:.....	5
G. Specification Approval Data:.....	6



A. General information about the course:

1. Course Identification:

1. Credit hours: (1)			
2. Course type			
A.	<input type="checkbox"/> University	<input type="checkbox"/> College	<input checked="" type="checkbox"/> Department <input type="checkbox"/> Track
B.	<input checked="" type="checkbox"/> Required		<input type="checkbox"/> Elective
3. Level/year at which this course is offered: (Year: 1, Level: 1)			
4. Course general Description:			
<p>The course covers the following topics: the proliferation of algorithmic decision making, autonomous systems, machine learning and explanation, the search for balance between regulation and innovation, and the effects of AI on the dissemination of information, along with questions related to individual rights, discrimination, and architectures of control. The students are required to submit case study analysis or comprehensive report about at least one of the previous mentioned topics. There will also be opportunities to present and discuss students' findings and outcomes.</p>			
5. Pre-requirements for this course (if any):			
None.			
6. Co-requirements for this course (if any):			
None.			
7. Course Main Objective(s):			
<p>The purpose of this course is to introduce students to several topics on ethics in AI. This course will help students to learn the standards of ethically aligned solution design in AI.</p>			

2. Teaching Mode: (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	12	80%
2	E-learning	3	20%
3	Hybrid <ul style="list-style-type: none"> ▪ Traditional classroom ▪ E-learning 	0	0%
4	Distance learning	0	0%

3. Contact Hours: (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	15
2.	Laboratory/Studio	-



3.	Field	-
4.	Tutorial	-
5.	Others (specify): Mid-Term and Final Exams	-
Total		45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods:

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0 Knowledge and understanding				
1.1	Identify critical issues in AI.	K1	Lecture, Brainstorming, Discussion	Direct: Case study Indirect: Survey
1.2	Discuss ethical practices in recent AI applications	K1	Lecture, Brainstorming, Discussion	Direct: Quiz, Exam Indirect: Survey
2.0 Skills				
2.1	Analyze the effects of immorality when designing an intelligent agent.	S1	Lecture, Problem Solving	Direct: Case study Indirect: Survey
2.2	Critique and evaluate a range of AI applications and propose a solution to an ethical problem in AI.	S2	Lecture, Project, Problem Solving	Direct: Case study Indirect: Survey
2.3	Engage in critical reflection of current ethical issues in AI.	S3	Lecture, Project, Problem Solving	Direct: Case study Indirect: Survey
3.0 Values, autonomy, and responsibility				
3.2	Incorporate legal and ethical standards in artificial intelligence to contribute effectively to the field.	V1	Discussion Self-Learning	Proposal Thesis report

C. Course Content:

No	List of Topics	Contact Hours
1.	Introduction of AI ethics and society, Ethical reasoning	2
2.	Inequality, discrimination, and algorithmic biases	2





3.	Ownership, control, and access data integrity and privacy	2
4.	Transparency of autonomous systems, agency, and liability	2
5.	Governance, explainability, and accountability	2
6.	Case studies analysis / Comprehensive report	2
Total		15

D. Students Assessment Activities:

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Case study or comprehensive report & presentation	14 th week	100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities:

1. References and Learning Resources:

Essential References	<ul style="list-style-type: none"> There is no required textbook for this class. All readings will be available online through the links in this syllabus
Supportive References	<ul style="list-style-type: none"> https://ethicsinaction.ieee.org/ Additional material will be provided in class based on the topics.
Electronic Materials	<ul style="list-style-type: none"> Links provided by the instructor.
Other Learning Materials	<ul style="list-style-type: none"> Handouts and Presentations Slides prepared by the instructor. Blackboard.

2. Educational and Research Facilities and Equipment Required:

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	<ul style="list-style-type: none"> Classroom (20 students/class) Computer labs
Technology equipment (Projector, smart board, software)	<ul style="list-style-type: none"> Video projector / data show White board
Other equipment (Depending on the nature of the specialty)	<ul style="list-style-type: none"> To be announced during the course!

F. Assessment of Course Quality:

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students Coordinator	Indirect (Course exit survey) Indirect (Feedback from Course Coordinator)





Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of students assessment	Faculty member Coordinator	Indirect (Feedback from Faculty member) Indirect (Feedback from Course Coordinator)
Quality of learning resources	Students Faculty member Coordinator Council Curriculum Committees	Indirect (Course exit survey) Indirect (Feedback from Faculty member) Indirect (Feedback from Course Coordinator) Indirect (Feedback from council) Indirect (Feedback from Graduate Committees)
The extent to which CLOs have been achieved	Students Faculty member Coordinator Curriculum Committees	Indirect (Course exit survey) Indirect (Feedback from Faculty member/ Course Coordinator/ Graduate Committee)
Other	-	-

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval Data:

COUNCIL /COMMITTEE	GRADUATE PROGRAMS COMMITTEE – CS DEPT.
REFERENCE NO.	V2
DATE	5/5/2024

