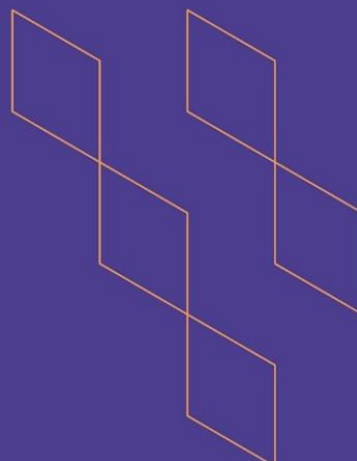




T-104
2022

Course Specification



Course Title: Ethics in Computing

Course Code: IS1501

Program: Computer Information Systems

Department: Computer Information Systems

College: Computer Science and information technology

Institution: Al-Baha University

Version: T104 – V1

Last Revision Date: February 9, 2023



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A. General information about the course:

Course Identification

1. Credit hours: 3 Credit Hours (3, 0, 0) (Lecture, Lab, Tutorial)
(3 Contact Hours)

2. Course type

a. University College Department Track Others

b. Required Elective

3. Level/year at which this course is offered: 9th level/ 3rd Year

4. Course General Description:

This module explores the ethical considerations and challenges associated with computing, information systems, and emerging technologies. The course covers topics such as privacy, security, intellectual property, access and equity, and social responsibility in computing. The module also examines the impact of computing on society, the environment, and human well-being, and introduces students to ethical theories and frameworks that can guide ethical decision-making in computing.

In addition, the module includes a review of related laws and regulations governing computing and information systems, including the Saudi Act for Anti-Cyber Crime Law. Through case studies and group discussions, students will develop a deeper understanding of the ethical implications of computing and information systems, and learn how to apply ethical principles to real-world scenarios.

5. Pre-requirements for this course (if any): none

6. Co- requirements for this course (if any): none

7. Course Main Objective(s)

- Understand the ethical considerations and challenges associated with computing, information systems, and emerging technologies.
- Identify and analyze ethical issues related to privacy, security, intellectual property, access and equity, and social responsibility in computing.
- Analyze the impact of computing on society, the environment, and human well-being, and evaluate ethical responses to these impacts.
- Evaluate and apply ethical theories and frameworks to guide ethical decision-making in computing.
- Understand the laws and regulations governing computing and information systems, including the Saudi Act for Anti-Cyber Crime Law, and their implications for ethical practices in computing.
- Develop critical thinking skills and apply ethical principles to real-world scenarios through case studies and group discussions.
- Demonstrate an understanding of the importance of ethical practices in computing and information systems, and the role of professionals in upholding ethical standards.



1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	30	100%
2.	E-learning		
3.	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		
4.	Distance learning		

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	-
3.	Field	-
4.	Tutorial	-
5.	Others (specify)	-
Total		30

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	Understand the fundamental ethical principles and frameworks that guide ethical decision-making in computing.	K1	<ul style="list-style-type: none"> • Lectures • In-class discussions 	<ul style="list-style-type: none"> - Case-studies - Midterm - Final exam
1.2	Understand the social, cultural, and economic implications of computing, information systems, and emerging technologies on society and the environment.	K2	<ul style="list-style-type: none"> • Lectures • Case-studies • In-class discussions 	<ul style="list-style-type: none"> - Case-studies - Midterm - Final exam
1.3	Understand the legal and regulatory frameworks governing computing and information systems, and their implications for ethical practices in computing.	K3	<ul style="list-style-type: none"> • Lectures • Case-studies • In-class discussions 	<ul style="list-style-type: none"> - Midterm - Final exam
2.0	Skills			
2.1	Analyze and evaluate ethical issues related to computing, information systems, and	S1	<ul style="list-style-type: none"> • Lectures • Self-learning (reading) 	<ul style="list-style-type: none"> - Case-studies



Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	emerging technologies using critical thinking and ethical reasoning skills.			
2.2	Apply ethical principles and frameworks to real-world scenarios in computing and information systems.	S2	<ul style="list-style-type: none"> Lectures Self-learning (reading) 	<ul style="list-style-type: none"> Case-studies Final exam
2.3	Demonstrate effective communication skills through group discussions and case studies related to ethical issues in computing.	S3	<ul style="list-style-type: none"> Self-learning Case-studies In-class discussions 	<ul style="list-style-type: none"> Case-studies
2.4	Develop and implement strategies to promote ethical practices in computing and information systems.	S4	<ul style="list-style-type: none"> Lectures Case-studies 	<ul style="list-style-type: none"> Case-studies
3.0	Values, autonomy, and responsibility			
3.1	Demonstrate a commitment to upholding ethical principles and values in computing and information systems.	V1	<ul style="list-style-type: none"> Case-studies 	<ul style="list-style-type: none"> Case-studies
3.2	Demonstrate responsibility and accountability for ethical decision-making in computing and information systems.	V1	<ul style="list-style-type: none"> Case-studies 	<ul style="list-style-type: none"> Case-studies
3.3	Develop a personal code of ethics for computing and information systems that reflects a commitment to social responsibility and ethical practices.	V2	<ul style="list-style-type: none"> Self-learning (reading) 	<ul style="list-style-type: none"> Case-studies
3.4	Develop an understanding of the role of computing professionals in promoting ethical practices and social responsibility in the field.	V2	<ul style="list-style-type: none"> Self-learning (reading) 	<ul style="list-style-type: none"> Case-studies



C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Ethics and Computing: Basic concepts of ethics, ethical principles and theories, and their application in the field of computing.	4
2.	Intellectual Property: Copyright law, patents, and trademarks, and the ethical considerations related to the use and protection of intellectual property in computing.	4
3.	Privacy and Surveillance: Ethical issues related to data collection, storage, and use, and the impact of surveillance and monitoring on individual privacy and human rights.	4
4.	Security and Cybercrime: Ethical issues related to cybersecurity, hacking, and cybercrime, and the legal and regulatory frameworks governing cybersecurity.	4
5.	Social Responsibility: Ethical considerations related to the social impact of computing on society, including issues related to access and equity, digital divide, and social justice.	4
6.	Emerging Technologies and Ethical Challenges: Ethical considerations related to emerging technologies such as artificial intelligence, blockchain, and the internet of things (IoT).	4
7.	Professional Ethics: Professional codes of conduct, ethical standards and guidelines, and the role of computing professionals in promoting ethical practices and social responsibility.	4
8.	Case Studies and Ethical Analysis: Case studies and ethical analysis of real-world scenarios related to computing and information systems, to develop critical thinking skills and ethical reasoning.	2
Total		30

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Case studies (assignments)	Every two Weeks	20%
2.	Midterm	5	20%
4.	Final Exam	13	60%

*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"> • Baase, S. & Henry, T. (2022). A gift of fire: Social, legal, and ethical issues for computing technology (5th ed.). Pearson Education. • Kizza, J.M. (2022). Ethical and social issues in the information age (4th ed.). Springer.
Supportive References	<ul style="list-style-type: none"> • Quinn, M. J. (2020). Ethics for the information age, 8th edition. Pearson Education. • Lessig, L. (2006). Code and other laws of cyberspace. Basic Books. • Floridi, L. (2010). The philosophy of information. Oxford University Press.
Electronic Materials	<ul style="list-style-type: none"> • Saudi Arabia. (2007). Law of combating cybercrimes, Royal Decree No. M/17. Available from the official website of the Saudi Arabian Ministry of Interior: https://laws.boe.gov.sa/BoeLaws/Laws/LawDetails/25df73d6-0f49-4dc5-b010-a9a700f2ec1d/1 • United Kingdom. (2018). Data Protection Act 2018. Available from the official website of the UK Government: https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted • European Union. (2016). Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation). Available from the official website of the European Union: https://eur-lex.europa.eu/eli/reg/2016/679/oj
Other Learning Materials	None

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	<ul style="list-style-type: none"> • A classroom or lecture hall with whiteboard for 25 students. • A digital circuit's laboratory.
Technology equipment (projector, smart board, software)	<ul style="list-style-type: none"> • A digital image projection system with connection to desktop computer and laptop computer. • High speed Internet connection. • An instructor computer station.
Other equipment (depending on the nature of the specialty)	None





F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Program Leader • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Course evaluation by Peer Reviewers (indirect). • Class visit by Program Leader • Comprehensive Course report (where we can find information about teaching difficulties and action plan, ...)
Effectiveness of students assessment	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Course Coordinator • Exam Evaluation Committee • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Assessment results (direct) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about assessment difficulties and action plan, ...) • Exam evaluation by the Exam Evaluation Committee (indirect)
Quality of learning resources	<ul style="list-style-type: none"> • Students • Faculty • Peer Reviewers • Course Coordinator 	<ul style="list-style-type: none"> • Surveys (indirect) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, ...)
The extent to which CLOs have been achieved	<ul style="list-style-type: none"> • Faculty • Program Leader • Course Coordinator • 	<ul style="list-style-type: none"> • Student Results (direct) • Comprehensive Course report (where we can find the CLO assessment results)
Other	None	None

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

Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	Curriculum Committee Meeting
REFERENCE NO.	
DATE	March 30, 2023

