Republic of Yemen

Ministry of Higher Education & Scientific Research

Council of Academic Accreditation & Quality Assurance of Higher Education(CAQA)

21 September University for Medical and Applied Sciences

Faculty of Engineering and Computer

Department of Information Technology

Program of Information Technology

Course Specification of

Current issues in computer

Course Code. (07.01. 720)

2024

T4: This Template is Developed and Approved by CAQA-Yemen, 2023

Prepared by:	Reviewed by:	Head of the Department:	Quality Unit:	Dean
Dr. Malek Algabri	Dr. -----			

I. General Information:

1.	Course Title:	Current issues in computer				
2.	Course Code:	07.01. 720				
3.	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	
			Lecture	Tutorial/ Seminar	Lab	Clinical
		3	3	--	---	--
4.	Level/ Semester at which this Course is offered:	Level 3/ Semester 2				
5.	Pre –Requisite (if any):					
6.	Co –Requisite (if any):	non				
7.	Program (s) in which the Course is Offered:	Bachelor of Medical Information Technology				
8.	Language of Teaching the Course:	English				
9.	Location of Teaching the Course:	Faculty of Medical Technology				
10.	Prepared by:	Dr. Malek Algabri				
11	Date and Number of Approval by Council:					

II. Course Description:

This course covers Current issues in computer that are raised by technologies in the field of computing, teaches students how to apply professional codes of conduct, and familiarizes students with the various professional options and activities within the field of computing. The main concepts discussed are: Professional issues in the information technology professions; history and social context of computing; professional responsibilities; privacy; intellectual property; risks and liabilities of computer-based systems.

III. Course Intended Learning Outcomes (CILOs) : Upon successful completion of the course, students will be able to:		Referenced PILOs		
	A. Knowledge and Understanding:	**I, P or M/A**		
a1	Describe professional institutions within computing.		A1	Demonstrate an understanding of appropriate models, theories, mathematical foundations, and techniques related to Health Information Technology discipline. .
a2	Describe legislation that applies to the computing profession		A4	Demonstrate a sound understanding the computing concept related to analysis, design, implementation, and evaluation of Health information system.
			A3	
	B. Intellectual Skills:			
b1	Demonstrate familiarity with current social and ethical issues related to computing		B3	Explore variety of challenges and problems related to Health Information Technology to select the optimal solution
b2	Relate computing issues to philosophical systems and ethics		B4	Evaluate IT based solution to meet a given set of Health requirements in the context of Health Information Technology discipline
			B3	
	C. Professional and Practical Skills:			
c1	Evaluate the impact of legislation and codes of conduct within the computing profession.		C2	design, implement, and test a computing-based solution to meet a given set of computing requirement in the context of Health Information Technology
c2	Apply ethical principles within		C3	Use systematic approaches to

	computing.			select, develop, apply integrates, and administrate secure computing technologies to accomplish user and Health goals.
			C3	
	D. Transferable Skills:			
d1	demonstrate the current issues in computer effective communication and negotiation skills		D2	Commit to professional ethics, responsibilities, and norms of professional IT practices
d2			D3	
			D3	
I= Introduced, P=Practiced or M/A= Mastered/Advanced				

	(A) Alignment of Course Intended Learning Outcomes (Knowledge and Understanding) to Teaching Strategies and Assessment Methods:		
	Course Intended Learning Outcomes	**Teaching Strategies**	**Assessment Strategies**
a1	Describe professional institutions within computing.	▪ Lectures, Interactive class ▪ discussions, Tutorials.	▪ Written exams, assignment ▪ work, quizzes, submission of ▪ reports
a2	Describe legislation that applies to the computing profession		
a3		▪	▪
	(B) Alignment of Course Intended Learning Outcomes (Intellectual Skills) to Teaching Strategies and Assessment Methods:		
	Course Intended Learning Outcomes	**Teaching Strategies**	**Assessment Strategies**
b1	Demonstrate familiarity with current social and ethical issues related to computing	▪ Lectures, Tutorial, Interactive class ▪ discussions, and group work, ▪ presentation	▪ Written exams, Project, Case ▪ studies and assignment work.
b2	Relate computing issues to		

	philosophical systems and ethics		
	…	▪	▪

	(C) Alignment of Course Intended Learning Outcomes (Professional and Practical Skills) to Teaching Strategies and Assessment Methods:		
	Course Intended Learning Outcomes	**Teaching Strategies**	**Assessment Strategies**
c1	Evaluate the impact of legislation and codes of conduct within the computing profession.	▪ Short lectures, case study, Laboratory ▪ experiments, Project, and group work, ▪ Field training, Drawing sessions	▪ Written exams, quizzes, Practical ▪ exam assignment and report ▪ submission
c2	Apply ethical principles within computing.		
	…	▪	▪
		▪	▪

	(D) Alignment of Course Intended Learning Outcomes (Transferable Skills) to Teaching Strategies and Assessment Methods:		
	Course Intended Learning Outcomes	**Teaching Strategies**	**Assessment Strategies**
d1	demonstrate the current issues in computer effective communication and negotiation skills	▪ Group work, Self-study, Interactive ▪ class discussions, Tutorials, Seminar/ ▪ project/presentation, Laboratory ▪ experiments, Project, and Art Gallery	▪ Project presentation, Laboratory ▪ exam, Report/Project
d2			
	…	▪	▪

IV. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
1	Introduction to Ethics Quiz 1, Discussion Board 1	Introduction to Ethics - Quiz 1, Discussion Board 1	1	2	a1,a2
2	ACM Code of Ethics Quiz 2, Discussion Board 2	- ACM Code of Ethics Quiz 2, Discussion Board 2	1	2	a1,a2
3	Intellectual and Intangible Property Quiz 3, Discussion Board 3	- Intellectual and Intangible Property Quiz 3, Discussion Board 3	1	2	a1,a2,b1
4	Establishing a Culture of Trust Quiz 4, Discussion Board 4	- Establishing a Culture of Trust Quiz 4, Discussion Board 4	1	2	a1,a2,b2,d1
5	Cybersecurity Quiz 5, Discussion Board 5 Test 1	Cybersecurity Quiz 5, Discussion Board 5 -	1	2	a1,a2,b1,b2,d1
6	Textbook, Chapters 1 -2 Quiz 6, Discussion Board 6	- Textbook, Chapters 1 -2 Quiz 6, Discussion Board 6			
7	Mid team	- Mid team	1	2	b1,b2,c1
8	Textbook, Chapters 3 – 4	- Textbook, Chapters 3 – 4 Quiz 7, Discussion Board 7	1	2	b1,b2,c1,d1

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
	Quiz 7, Discussion Board 7				
9	Textbook Chapters 5 – 6 Quiz 8, Discussion Board 8	- Textbook Chapters 5 – 6 Quiz 8, Discussion Board 8	1	2	b1,b2,c1,d1
10	Textbook Chapters 7 – 8 Quiz 9, Discussion Board 9	- Textbook Chapters 7 – 8 Quiz 9, Discussion Board 9	1	2	b1,b2,c1,d1
11	Ethical Issues with AI Quiz 10, Discussion Board 10 Test 2	Ethical Issues with AI Quiz 10, Discussion Board 10 - Test 2	1	2	a1,a2, b1,b2,c1,d1
12	IIoT, Industry 4.0 and Autonomous Systems Quiz 11, Discussion Board 11	IIoT, Industry 4.0 and Autonomous Systems - Quiz 11, Discussion Board 11	1	2	a1,a2, b1,b2,c1,d1
13	Autonomous Vehicles Quiz 12, Discussion Board 12	Autonomous Vehicles - Quiz 12, Discussion Board 12	1	2	a1,c1,c2, b1,b2,c1,d1
14	Thanksgiving Holiday	- Thanksgiving Holiday	1	2	a1,c1,c2, b1,b2,c1,d1

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours	Learning Outcomes (CILOs)
15	Ethical issues in Gaming Quiz 13, Discussion Board 12	Ethical issues in Gaming - Quiz 13, Discussion Board 12	1	2	a1,c1,c2, b1,b2,c1,d1
16	Final Theoretical Exam	- Final Theoretical Exam	1	2	a1,a2, a1,c1,c2, b1,b2,c1,d1
Number of Weeks /and Units Per Semester			16	32	

VII. Assignments:

No.	Assignments	Week Due	Mark	Aligned CILOs (symbols)
1	**Assignment 1:** Ideation Assignment	1-10	5	a1,a2, a1,c1,c2, b1,b2,c1,d1
2	**Assignment 2:** Ideation Presentation	2-12	5	a1,a2, a1,c1,c2, b1,b2,c1,d1
3	**Assignment 3:** Class Attendance and Participation	Every unit	5	a1,a2, a1,c1,c2, b1,b2,c1,d1
4	**In-Class Assignments, Activities & Homework**	2-12	5	a1,a2, a1,c1,c2, b1,b2,c1,d1
Total				

VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments	1-12	20		a1,a2, a1,c1,c2, b1,b2,c1,d1
2	Mid-Term Theoretical Exam	7-8	20		a1,a2,b1,b2,d1
3	Final Theoretical Exam	16	60		a1,a2, a1,c1,c2, b1,b2,c1,d1
Total			100		

IX. Learning Resources:

- *Written in the following order:* Author, Year of publication, Title, Edition, Place of publication, Publisher.

1- Required Textbook(s) (maximum two):

1- The Future of Feeling: Building Empathy in a Tech-Obsessed World, by Kaitlin Ugolik Phillips, Published 2020

2- Robert Ayres, The Essence of Professional Issues in Computing, Prentice Hall, Year: 1999 ,ISBN: 0139087400,9780139087400

2- Essential References:

1- Jones, Simon;Blundell, Barry;Duquenoy, Penny, Ethical, legal and professional issues in computing, Thomson, Year: 2008 ,ISBN: 9781844807499,1844807495

2- Baase. Sara. (2017). A Gift of Fire: Social, Legal, and Ethical Issues for Computing and the Internet. 5th edition. Pearson. ISBN: 9780134615271.

3- Reynolds, G. (2016). Ethics in Information Technology. 5th Edition. Cengage Technology. ISBN – 9781285197159

4- Spinello. R. (2020). CyberEthics: Morality and Law in Cyberspace. 7th Edition. Jones & Bartlett. 2020. ISBN: 1284184064.

3- Electronic Materials and Web Sites etc.:

Websites:

1-

X. Course Policies: (Based on the Uniform Students' By law (2007)

1	**Class Attendance:** Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	**Tardiness:** A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	**Exam Attendance/Punctuality:** No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	**Assignments & Projects:** Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	**Cheating:** Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	**Forgery and Impersonation:** Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	**Other policies:** The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.

Faculty of Medical Technology

Department of Medical Information Technology

Program of Medical Information Technology

Course Specification of

Current issues in computer

Course Code. (07.01. 720)

I. Information about Faculty Member Responsible for the Course:								
Name of Faculty Member:		Office Hours						
Location& Telephone No.:	——							
E-mail:	--@–.–	SAT	SUN	MON	TUE	WED	THU	

2024../2025..

II. Course Identification and General Information:

	Course Title:	Current issues in computer				
	Course Code:	07.01. 720				
	Credit Hours:	Credit Hours	Theory Contact Hours		Practical Contact Hours	
			Lecture	Tutorial/ Seminar	Lab	Clinical
		3	3	--	---	--
	Level/ Semester at which this Course is offered:	Level 3/ Semester 2				
	Pre –Requisite (if any):					
	Co –Requisite (if any):	non				
	Program (s) in which the Course is Offered:	Bachelor of Medical Information Technology				
	Language of Teaching the Course:	English				
	Location of Teaching the Course:	Faculty of Medical Technology				
	Prepared by:	Dr. Malek Algabri				
11	Date and Number of Approval by Council:					

III. Course Description:

This course covers Current issues in computer that are raised by technologies in the field of computing, teaches students how to apply professional codes of conduct, and familiarizes students with the various professional options and activities within the field of computing. The main concepts discussed are: Professional issues in the information technology professions; history and social context of computing; professional

responsibilities; privacy; intellectual property; risks and liabilities of computer-based systems.

IV. Course Intended Learning Outcomes (CILOs) :

Upon successful completion of the Course, student will be able to:

	A. **Knowledge and Understanding:**
a1	Describe professional institutions within computing.
a2	Describe legislation that applies to the computing profession
	B. **Intellectual Skills:**
b1	Demonstrate familiarity with current social and ethical issues related to computing
b2	Relate computing issues to philosophical systems and ethics
	C. Professional and Practical Skills:
c1	Evaluate **the impact of legislation and** codes of conduct within the computing profession.
c2	Apply ethical principles within computing.
	D. Transferable Skills:
d1	demonstrate the current issues in computer effective communication and negotiation skills
d2	

I= Introduced, P=Practiced or M/A= Mastered/Advanced

V. Course Contents:

A. Theoretical Aspect:

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
1	Introduction to Ethics Quiz 1, Discussion Board 1	Introduction to Ethics – Quiz 1, Discussion Board 1	1	2
2	ACM Code of Ethics Quiz 2, Discussion Board 2	– ACM Code of Ethics Quiz 2, Discussion Board 2	1	2
3	Intellectual and Intangible Property Quiz 3, Discussion Board 3	– Intellectual and Intangible Property Quiz 3, Discussion Board 3	1	2
4	Establishing a Culture of Trust Quiz 4, Discussion Board 4	– Establishing a Culture of Trust Quiz 4, Discussion Board 4	1	2
5	Cybersecurity Quiz 5, Discussion Board 5 Test 1	Cybersecurity Quiz 5, Discussion Board 5 –	1	2
6	Textbook, Chapters 1 -2 Quiz 6, Discussion Board 6	Textbook, Chapters 1 -2 Quiz 6, Discussion Board 6		
7	Mid team	– Mid team	1	2
8	Textbook, Chapters 3 – 4 Quiz 7, Discussion Board 7	– Textbook, Chapters 3 – 4 Quiz 7, Discussion Board 7	1	2
9	Textbook Chapters 5 – 6 Quiz 8, Discussion Board 8	– Textbook Chapters 5 – 6 Quiz 8, Discussion Board 8	1	2
10	Textbook Chapters 7 – 8	– Textbook Chapters 7 – 8 Quiz 9, Discussion Board 9	1	2

No.	Units/Topics List	Sub Topics List	Number of Weeks	Contact Hours
	Quiz 9, Discussion Board 9			
11	Ethical Issues with AI Quiz 10, Discussion Board 10 Test 2	Ethical Issues with AI Quiz 10, Discussion Board 10 – Test 2	1	2
12	IIoT, Industry 4.0 and Autonomous Systems Quiz 11, Discussion Board 11	IIoT, Industry 4.0 and Autonomous Systems Quiz 11, Discussion Board 11	1	2
13	Autonomous Vehicles Quiz 12, Discussion Board 12	Autonomous Vehicles Quiz 12, Discussion Board 12	1	2
14	Thanksgiving Holiday	Thanksgiving Holiday	1	2
15	Ethical issues in Gaming Quiz 13, Discussion Board 12	Ethical issues in Gaming Quiz 13, Discussion Board 12	1	2
16	Final Theoretical Exam	Final Theoretical Exam	1	2
Number of Weeks /and Units Per Semester			16	32

VI. Teaching and Learning Strategies of the Course:

- Interactive lectures,
- Problem solving,
- Tutorials,
- Seminar/ Project/Presentation,
- Teamwork,
- Laboratory based session,
- Interactive Class Discussions,
- Directed Self- Study,

- Exercises and Home Works,
- Field Visits.

VII. Assessment Methods of the Course:

- Coursework Activities
- Written tests
- Written assessments such as multiple-choice questions and Quizzes
- Report/Project/ Practical Lab Sessions
- Home works and assignments.
- Presentations

VIII. Assignments:

No.	Assignments	Week Due	Mark
1	**Assignment 1:** Ideation Assignment	1-10	5
2	**Assignment 2:** Ideation Presentation	2-12	5
3	**Assignment 3:** Class Attendance and Participation	Every unit	5
4	**In-Class Assignments, Activities & Homework**	2-12	5
Total			

IX. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment
1	Assignments	1-12	20	
2	Mid-Term Theoretical Exam	7-8	20	
3	Final Theoretical Exam	16	60	
Total			100	

X. Learning Resources:

- *Written in the following order: Author, Year of publication, Title, Edition, Place of publication, Publisher.*

1- Required Textbook(s) (maximum two):

1- The Future of Feeling: Building Empathy in a Tech-Obsessed World, by Kaitlin Ugolik Phillips, Published 2020 Robert Ayres, The Essence of Professional Issues in Computing, Prentice Hall, Year: 1999 ,ISBN: 0139087400,9780139087400
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1- Jones, Simon;Blundell, Barry;Duquenoy, Penny, Ethical, legal and professional issues in computing, Thomson, Year: 2008 ,ISBN: 9781844807499,1844807495 1- Baase. Sara. (2017). A Gift of Fire: Social, Legal, and Ethical Issues for Computing and the Internet. 5th edition. Pearson. ISBN: 9780134615271. 2- Reynolds, G. (2016). Ethics in Information Technology. 5th Edition. Cengage Technology. ISBN – 9781285197159 Spinello. R. (2020). CyberEthics: Morality and Law in Cyberspace. 7th Edition. Jones & Bartlett. 2020. ISBN: 1284184064.
3- Electronic Materials and Web Sites etc.:
Websites:

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7	**Other policies:** The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.