1	**Course title**	Computing Ethics and Documentation
2	**Course number**	1902203
3	**Credit hours**	3
	Contact hours (theory, practical)	3
4	**Prerequisites/corequisites**	Fundamentals of Information Technology (1904101)
5	**Program title**	Computer Information Systems
6	**Program code**	2
7	**Awarding institution**	The university of Jordan
8	**School**	King Abdullah II School of Information Technology
9	**Department**	Computer Information Systems
10	**Level of course**	Undergraduate
11	**Year of study and semester (s)**	2rd year / each semester
12	**Final Qualification**	Bachelor of Science in Computer Information Systems
13	**Other department (s) involved in teaching the course**	None
14	**Language of Instruction**	English
15	**Teaching methodology**	☒ **Blended** ☐ Online
16	**Electronic platform(s)**	☒ **Moodle** ☐ Microsoft Teams ☐ Skype ☐ Zoom ☐Others:…………
17	**Date of production/revision**	9th October, 2022

18 Course Coordinator:

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19 Other instructors:

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20 Course Description:

This course aims to equip students with the necessary computing ethics and technical writing skills. It introduces computing ethics by adhering to the most well-known world standard code of ethics from national and international professional societies, organizations, and governmental bodies (CEI, ACM, IEEE, BCS, E-crime, E-Transaction laws, Artificial Intelligence (AI) in Jordan, and code of conduct in The University of Jordan). In addition, it introduces different types of technical reports (books, articles,

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proposals, user manual, progress reports, graduation project, and memorandums) and how to write them professionally and ethically with proper data representation, citation, and referencing. This course covers ethical writing through many practical skills including referencing styles, citation, quotation, and also through the awareness of the good document requirements, plagiarism forms, copy rights, fair use, creative commons, and intellectual property rights. Moreover, it covers computing ethics including Ethics in IT profession, programming ethics, AI ethics, and ethical computing responsibility from the professional, philosophical, and social perspectives. Further discussions about AI risks and the possibility of AGI and technological singularity will take place. Other ethical issues in technology are covered including electronic crimes, computer abuse, cyberbullying and stalking, privacy, confidentiality, anonymity, ethics in social media, and freedom of expression through the cyber space.

21 Course aims and outcomes:

Aims:
This course explains to the students computing ethics and technical writing skills. This course introduces computing ethics by adhering to the most well-known world standard code of ethics from national and international professional societies and organizations. In specific, it explains ethical writing (referencing, citation, quotation, and avoiding plagiarism), crimes, computer abuse, cyberbullying and stalking, privacy, confidentiality, anonymity, intellectual property, professional responsibility, various code of ethics to users and computing professionals. It also includes ethics in social media and freedom of expression. This course also explains the requirements of writing a good technical report and explains its structure. It discusses how to write different types of technical reports professionally and ethically with proper citation and referencing. These documents include reports, books, articles, proposals, user manual, progress reports, and memorandums.

Intended Learning Outcomes (ILOs):
Upon successful completion of this course students will be able to:

A. **Knowledge and Understanding:**
   A1) Understand basic technical writing, communication and documentation concepts, structures, and operations.
   A2) Illustrate how the creative use of documentation and technical writing can give him/her a competitive advantage.
   A3) Understand and adhere to the basic guidelines to ethical writing.
   A4) Understand the fundamentals of computing ethics and professional issues.
   A5) Knowledge of global impact of computing ethical issues and the national and international standards governing computing ethics.

B. **Intellectual skills:**
   B1) Analyze and compare the advantages of technical writing and documentation in improving personal ability.
   B2) Think how to improve team productivity by using technical writing and interpersonal communication.
   B3) Think of means that avoid falling in intentional plagiarism, computer crimes, computer misuse, and many other writing and computing ethical issues such as privacy, intellectual property rights, confidentiality, and may more.

C. **Subject Specific skills:**
   C1) Implement practical cases, by using different types of technical communication methods and documentation styles.
   C2) Practice writing skills and methods that help in avoiding plagiarism in academic writing.
   C3) Acknowledge the national and international laws and standards pertaining writing and computing ethical issues.

D. Transferable Key Skills:
    D1) Discuss and work in a group in order to design and write the specification of a new case.
    D2) Work with other groups in order to make different implementations, of the same case specification.
    D3) Present the final work (project) and make a demo.
    D4) Apply writing and computing ethical standards and guidelines in future projects and career.

ABET Students Outcomes (SOs):
    1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
    3. Communicate effectively in a variety of professional contexts.
    4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
    5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

Mapping ILOs to ABET SOs:

ILOs	ABET SOs
A1, A2, B1, B2, C1, D1, D2,	1
A1, A2, B1, B2, C1, D1, D2	3
A1, A2, A3, A4, A5, B1, B2, B3, C2, C3, D1, D2, D3, D4	4
A1, A2, A3, A4, A5, B1, B2, B3, C1, C2, C3, D1, D2, D3, D4	5

22 Topic Outline and Schedule:

Topic	Week	ILOs	ABET SOs	TLA (teaching, learning and Assessment)	Teaching Methods*/platform
Chapter 1: An Overview of Ethics	1,2	A1, A2, A3, B2, B3, C2, D1, D4	D, E	Textbook 1/Textbook 2, Lecture Notes 1 Midterm Exam	Face to Face/ Lecture Notes on Moodle
Chapter 2: Intellectual Property Rights	2	B2, B3, D4	D, E	Textbook 2, Lecture Notes 2, Online Resources, Quiz1+ Midterm Exam	Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle
Chapter 3: Freedom of Expression	3	B3, D1, D2, D3, D4	D, E	Textbook 2, Lecture Notes 3, Online Resources, Quiz 2+ Midterm Exam	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle
Chapter 4: Social Networking Ethical Issues	4	A5,C3, D4	D, E	Textbook 2, Lecture Notes 4, Online Resources, Quiz 3+ Midterm Exam	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle
Chapter 5: Ethical Writing	5,6	A4,B3, D4	D, E	Textbook 2, Lecture Notes 5, Online Resources, Task 1 + Midterm Exam	Face to Face + Asynchronous lecture (Recorded Video on the Moodle which is a practical lesson on References) + Lecture Notes on Moodle
Chapter 6: Technical Writing Style	6,7	A1, A2	D	Textbook 1, Lecture Notes 6 Task1	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle

Chapter 7: Technical Writing Applications	7,8	A1, A2, B1, B2, C1, D1, D2	A, D, F	Textbook 1, Lecture Notes 7 Project	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + practical lesson on the table of Contents + Lecture Notes on Moodle
Chapter 8: Data Presentation	9,10	A1, A2, B1	A, D, E	Textbook 1, Lecture Notes 8 Task1	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle + Practical lesson on Moodle (Video)
Chapter 9: Report Content and Supporting Sections	11-14	A1, A2, B1, D1, D2	A, D, E	Textbook 1, Lecture Notes 9 Project	Face to Face + Asynchronous lecture (Recorded Video on the Moodle) + Lecture Notes on Moodle + a practical lesson on Moodle (Video)
Final Exam	15			Final exam	

23 Detailed Topic Outline and Schedule:

Week	Lecture	Topic	Teaching Methods*/platform	Evaluation Methods**	References
1	1.1 (9/10)	Welcome and orientation (review syllabus, objectives, textbook, group project and tasks, online material and teaching methods) + Introduction to the course	Face to face	None	Course Syllabus and Announcements on ELearning platform
	1.2 (11/10)	**Ch1:** Introduction to Ethics in Technology	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 1 on ELearning platform
	1.3 (13/10)	**Ch1:** Introduction to Ethics in Technology	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 1 on ELearning platform
2	2.1 (16/10)	**Ch1:** Introduction to Ethics in Technology	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 1 on ELearning platform
	2.2 (18/10)	**Ch1:** Introduction to Ethics in Technology	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 1 on ELearning platform
	2. 3 (20/10)	**Ch2:** Intellectual Property	Asynchronous (Recorded Video on the Moodle)	Quiz 1+ Midterm Exam	Text Book 2 + Lecture Notes 2 on ELearning platform
3	3.1 (23/10)	**Ch3:** Freedom Expression	Face to Face	Midterm Exam	Text Book 2 + Lecture Notes 3 on ELearning platform
	3.2 (25/10)	**Ch3:** Freedom Expression	Face to Face	Midterm Exam	Text Book 2 + Lecture Notes 3 on ELearning platform
	3.3 (27/10)	**Ch3:** Freedom Expression	Asynchronous (Recorded Video on the Moodle)	Quiz 2+ Midterm Exam	Text Book 2 + Lecture Notes 3 on ELearning platform
4	4.1 (30/10)	**Ch4:** Ethics in Social Media	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 4 on ELearning platform

	4.2 (1/11)	**Ch4:** Ethics in Social Media	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 2 + Lecture Notes 4 on ELearning platform
	4.3 (3/11)	**Ch4:** Ethics in Social Media	Asynchronous (Recorded Video on the Moodle)	Quiz 3+ Midterm Exam	Text Book 2 + Lecture Notes 4 on ELearning platform
5	5.1 (6/11)	**Ch5:** Ethical Writing **(Guidelines to write ethically)**	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 1 + Text Book 2 + Lecture Notes 5 + Practical video on: References and Citation on ELearning platform
	5.2 (8/11)	**Ch5:** Ethical Writing **(Guidelines to write ethically)**	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 1 + Text Book 2 + Lecture Notes 5 + Practical video on: References and Citation on ELearning platform
	5.3 (10/11)	**Ch5:** Ethical Writing **(practical lesson on References)**	Asynchronous (Recorded Video on the Moodle)	Task 1 + Midterm Exam	Text Book 1 + Text Book 2 + Lecture Notes 5 + Practical video on: References and Citation on ELearning platform
6	6.1 (13/11)	**Ch5:** Ethical Writing **(Guidelines to write ethically)**	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 1 + Text Book 2 + Lecture Notes 5 + Practical video on: References and Citation on ELearning platform
	6.2 (15/11)	**Ch5:** Ethical Writing **(Guidelines to write ethically)**	Face to Face	In-Lecture Questions + Midterm Exam	Text Book 1 + Text Book 2 + Lecture Notes 5 + Practical video on: References and Citation on ELearning platform
	6.3 (17/11)	**Ch6**: Technical Writing Style (Requirements)	Asynchronous (Recorded Video on the Moodle)	Quiz 4 + Task2	Text Book 1 + Lecture Notes 6 on ELearning platform
7	7.1 (20/11)	**Ch6**: Technical Writing Style	Face to Face	In-Lecture Questions + Short Exam + Task2	Text Book 1 + Lecture Notes 6 on ELearning platform
	7.2 (22/11)	**Ch6**: Technical Writing Style	Face to Face	In-Lecture Questions + Short Exam + Task2	Text Book 1 + Lecture Notes 6 on ELearning platform
	7.3 (24/11)	**Ch7:** Technical Writing Applications **(Memos & proposals)**	Asynchronous (Recorded Video on the Moodle)	Quiz 5 + Short Exam	Text Book 1 + Lecture Notes 7 on ELearning platform
8	8.1 (27/11)	**Ch7:** Technical Writing Applications **(progress reports)**	Face to Face	In-Lecture Questions + Short Exam	Text Book 1 + Lecture Notes 7 on ELearning platform
	8.2 (29/11)	**Ch7:** Technical Writing Applications **(User manual)**	Face to Face	In-Lecture Questions + Short Exam + projects	Text Book 1 + Lecture Notes 7 on ELearning platform

	8.3 (1/12)	**Ch7:** Technical Writing Applications **(practical lesson on table of contents)**	Asynchronous (Recorded Video on the Moodle)	projects	Text Book 1 + Lecture Notes 7 on ELearning platform
9	9.1 (4/12)	**Ch8:** Data Presentation (Figures)	Face to Face	Task1+ Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
	9.2 (6/12)	**Ch8:** Data Presentation (Figures)	Face to Face	Task1+ Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
	9.3 (8/12)	**Ch8:** Data Presentation (Tables)	Asynchronous (Recorded Video on the Moodle)	Quiz 6 + Task2 + Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
10	10.1 (11/12)	**Ch8:** Data Presentation (Errors in data presentation)	Face to Face	Task1+ Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
	10.2 (13/12)	**Ch9:** Report Content and Supporting Sections **(Introduction part)**	Face to Face	Project + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	10.3 (15/12)	**Ch8:** Data Presentation **(Practical Video on data presentation)**	Asynchronous (Recorded Video on the Moodle)	Task1 + Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
11	11.1 (18/12)	**Ch9:** Report Content and Supporting Sections **(Introduction part)**	Face to Face	Project + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	11.2 (20/12)	**Ch9:** Report Content and Supporting Sections **(Main text part)**	Face to face	Project + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	11.3 (22/12)	**Task 2**	Asynchronous on the Moodle	Task1 + Final Exam	Text Book 1 + Lecture Notes 8 + Practical Video on: Figures and Tables in Technical Writing (ELearning platform)
12	12.1 (25/12)	**Holiday**			
	12.2 (27/12)	**Ch9:** Report Content and Supporting Sections **(Main text part)**	Face to face	Task 1 + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform

	12.3 (29/12)	**Ch9:** Report Content and Supporting Sections (**Main text part: Practical Video on Error and Precision**)	Asynchronous on the Moodle	Final Exam	Text Book 1 + Lecture Notes 9 + Practical Video on: Error and Precision Measurement using Excel on ELearning platform
13	13.1 (1/1)	**Holiday**			
	13.2 (3/1)	**Ch9:** Report Content and Supporting Sections (**Main text part**)	Face to face	Task 1+ Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	13.3 (5/1)	**Ch9:** Report Content and Supporting Sections (**Supporting Sections**)	Asynchronous on the Moodle	Quiz 7 + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
14	14.1 (8/1)	**Ch9:** Report Content and Supporting Sections (**Conclusions Sections**)	Face to face	Project + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	14.2 (10/1)	**Ch9:** Report Content and Supporting Sections (**Conclusions Sections**)	Face to face	Project + Final Exam	Text Book 1 + Lecture Notes 9 on ELearning platform
	14.3 (12/1)	Projects Discussion	Face to face	Project presentation	Project Specifications and Evaluation Criteria on ELearning platform
15	15.1 (14/1)	Revision	Face to face	Non	Chapters 1 ~ 9
	15.2 (16/1)	Revision	Face to face	Non	Chapters 1 ~ 9
16	19/1-30/1	Final Exam			

24 Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

ILOs	Assessment Method and Requirements
A1, A2, A3, A4, A5, B2, B3, C2, C3, D3, D4	Exams (Midterm and Final)
A1, A2, A3, A4, A5, B1, B2, B3, C2, C3, D3, D4	Task 1 + Group Project
A1, A2, A3, B2, B3, C1, C2, D1, D2, D3	Short Exam +Quizzes

Midterm:	30%
Semester quizzes and tasks:	30%
Task 1	5%
Short Quiz	8%
Project	10%
In−class participation	2%
Online interactive Lectures H5P quizzes	5%
Final Exam	40%

25 Course Requirements:

- Mobile, Laptop or desktop computers
- Internet connection
- Moodle.

26 Course Policies:

A- Attendance policies:

According to University regulations the maximum allowable absence 15% of number of lectures/semester

B- Absences from exams and handing in assignments on time:

• Every student is expected to completely adhere to the assignments and report strict deadlines, absolutely no exceptions will be given.

• في حالة التغيب عن امتحان منتصف الفصل أو الإمتحان النهائي فلن يكون هناك إمتحان تعويضي إلا في حالة وجود عذر وحالة طارئة من المستشفى. على الطالب إبراز العذر لمدرس المادة في فترة لا تتجاوز الثلاثة أيام من تاريخ الإمتحان، وللمدرس الحق في قبول أو رفض العذر، وحسب التعليمات.

• Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President. For the final complaints, there will be a committee to review grading the final exam.

C- Health and safety procedures:

University regulations.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

The honor code applies to all work turned in for this course including exams and assignments. It is important that you understand the solutions to all problems, and the best way to gain an understanding is to work them out and write them up by yourself. Hence the policy is that you must submit your own work. You may not share your work with other students, unless it is allowed as group. Violating the policy will be taken as a no submission state for the assignment. University regulations will be preserved at all times.

E- Grading policy + Weighting (i.e. weight assigned to exams as well as other student work)

0-45	F	46-49	D-	50-52	D	53-55	D+
56-58	C-	59-61	C	62-68	C+	69-72	B-
73-76	B	77-82	B+	83-86	A-	87-100	A

F- Available university services that support achievement in the course:

For more details on University regulations please visit http://www.ju.edu.jo/Pages/Regulations.aspx.

G- Statement on Students with disabilities

Students with disabilities who need special accommodations for this class are encouraged to meet with the instructor and/or their academic advisor as soon as possible. In order to receive accommodations for academic work in this course, students must inform the course instructor and/or their academic advisor, preferably in a written format, about their needs no later than the 4th week of classes.

27 References:

- **Required book (s), assigned reading and audio-visuals:**

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- o **Textbook 1:** Wallwork, A. (2014). *User guides, manuals, and technical writing: A guide to professional English.* Springer.
- o **Textbook 2:** Kizza, J. M. (2015). *Ethics in Information Technology.* George W. Reynolds. Fifth edition

- **Recommended books, materials, and media:**
  - o Kennedy, X. J; Kennedy, D. M.; Muth M. F., "*The Bedford Guide for College Writers with Reader, Research Manual, and Handbook*", Bedford/St. Martin's, 11th Edition, 2016.
  - o Laura J Guark, John M. Lannon, "*A Concise Guide to Technical Communication*", 3rd Edition, Longman, 2007.
  - o Riordan Daniel and Pauley Wisconsin, *"Technical Report Writing Today"*, 8th Edition, Houghton Mifflin College Division, 2002.

- **Journals:**
  - o The University of Jordan Electronic library (E-Library). Available on: http://library.ju.edu.jo/eliblink.asp
  - o Questia magazine (http://www.questia.com)
  - o Journal of Communication, Wiley.
  - o Ethics and Information Technology, Springer.
  - o Journal of Information, Communication and Ethics in Society, Emerald Publishing.

- **Laws and Code of Ethics:**
  - o Jordan laws for E-Crimes, E-Transactions, Intellectual Property, …etc.
  - o Computer Ethics Institute (CEI)
  - o Association of Computing Machinery (ACM)
  - o Institute of Electrical and Electronics Engineers (IEEE)
  - o British Computer Society (BCS)

- **Educational Platforms:**
  - o Elearning.ju.edu.jo
  - o lmsystem.ju.edu.jo
  - o http://teams.office.com/

28 Additional information:

Course description, Teaching materials, Assignments and Announcements are available in the course page on http://elearning.ju.edu.jo

Name of Course Coordinator: Dr. Huda Karajeh   Signature: -------- *Tahani Khatib* ------

Date: 9/10/2022

Head of Curriculum Committee/Department: ----------------------Signature: ----------------------

Head of Department: ---------- **Dr. Mousa Al Akhras**--------------Signature: ----------------------

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Head of Curriculum Committee/Faculty: -----------------------------Signature: ----------------------

Dean: ---Signature: ----------------------